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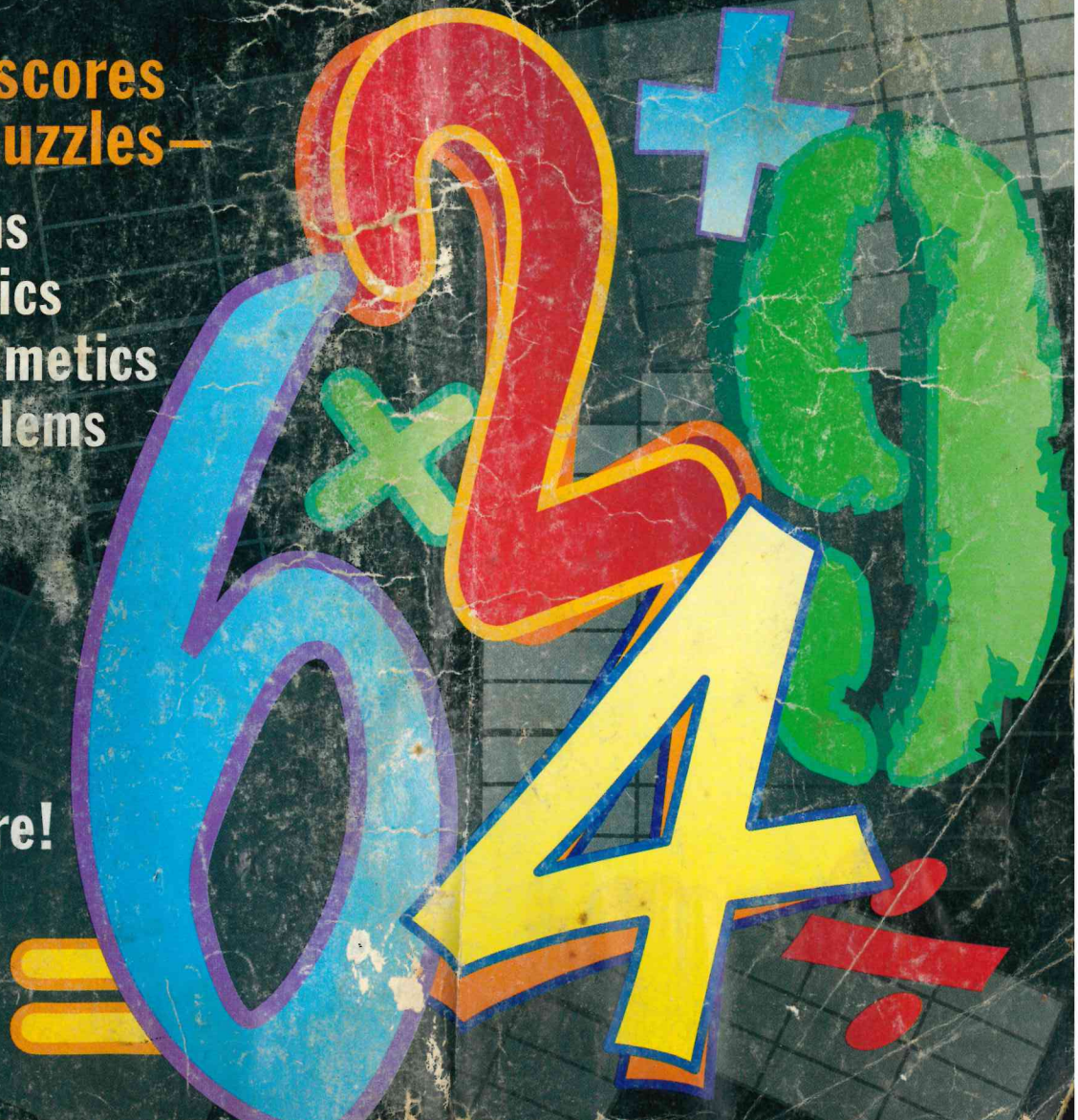


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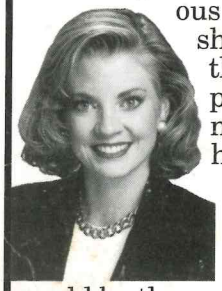

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*Cover illustration by O'Neil Nanco*

**On-sale dates for Dell puzzle magazines are on page 66.**

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# A "TEST" FROM THE EDITORS

Have you ever heard the expression "Pay attention, you may be quizzed on this later"? Well, that day has arrived! (Along with the latest issue of *Dell Math Puzzles and Logic Problems*.) Without turning back one page or closing the magazine, let's see how much attention you paid when you read the copy on the cover and when you perused the list of puzzles in the Table of Contents. Ready?

1. How many Logic Problems are in this (and every) issue of *Dell Math Puzzles and Logic Problems*?
   a. 5 b. 15 c.150
2. What's the name of the puzzle that brings to mind mystical powers?
   a. Black Magic b. Jigsaw Logic c. Trigons
3. What puzzle title makes you want to shout when you've finished solving?
   a. What's the Order? b. Crossmath c. Bingo Plays
4. Of what puzzle can you say there are exactly a score in this magazine?
   a. Cross Sums b. Four Score c. Word Arithmetic
5. Take the number of Figure Logics and multiply it by the number of Number Places, and next take away the page number on which you can find Magic Number Square. You are then left with the page number of what puzzle?
   a. Secret Squares (page 44) b. Sentence Arithmetic (page 24)
   c. Trace Elements (page 12)
6. In letter format (friendly-letter format, please), write a short essay critiquing this issue of *Dell Math Puzzles and Logic Problems*. You may use any method you wish when approaching this assignment, but we do request that you use a first-class postal method when mailing us your essay. If you need more space than is provided below, please feel free to use your own stationery.

Send essays to:

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The next issue of *Dell Math Puzzles and Logic Problems* goes on sale September 22.

Answers to multiple-choice questions:
1. b (5 wouldn't be enough and 150 wouldn't fit); 2. a (Jigsaw Logic would be puzzling, not mystical; Trigons sounds too scientific to be mystical); 3. c (Crossmath would mean you're angry; if you're shouting "What's the Order?" you haven't finished solving); 4. a (There are a pair of Four Score and two score and five — 45 — Word Arithmetics); 5. b (10 x 6 = 60, 60 – 36 = 24).

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# LOGIC PROBLEM

by Claudia Strong

## 1. COLOR BURGIE BEAR

Preschooler Zachy received a promotional gift from a local fast-food restaurant: a four-page coloring book and a box of four crayons. The coloring book, which was entitled "Color Burgie Bear," featured the restaurant's mascot in four different settings (one showed him playing baseball). Zachy's mom suggested to him that he use more than one crayon when he colored the pictures; Zachy always listens to his mom. But kids can be very literal and although he used all four colors, he chose to color each page a different single color (one he colored all yellow)! From the following clues, can you determine what picture appeared on each page and the color Zachy used for each?

1. Of the two middle pages (pages two and three), Zachy colored one red and the other green.
2. The page that showed Burgie Bear riding a horse at the rodeo was the one immediately before the one Zachy colored all blue.
3. The picture of the restaurant's mascot going sailing, which wasn't on page one, was not the one Zachy colored red.
4. The page Zachy colored green came before the one that depicted Burgie Bear dancing.

**Solution is on page 61.**

**If you care to use the chart below in solving this Problem, you do so by entering all information obtained from the clues using, perhaps, an X to indicate a definite "no" and a dot to show a definite "yes." Remember: Once you enter a definite "yes" (dot), place a "no" (X) in all the rest of the boxes in each row and column that contains the dot.**

| | blue | green | red | yellow | baseball | dancing | rodeo | sailing |
|---|---|---|---|---|---|---|---|---|
| Page 1 | | | | | | | | |
| Page 2 | | | | | | | | |
| Page 3 | | | | | | | | |
| Page 4 | | | | | | | | |
| baseball | | | | | | | | |
| dancing | | | | | | | | |
| rodeo | | | | | | | | |
| sailing | | | | | | | | |

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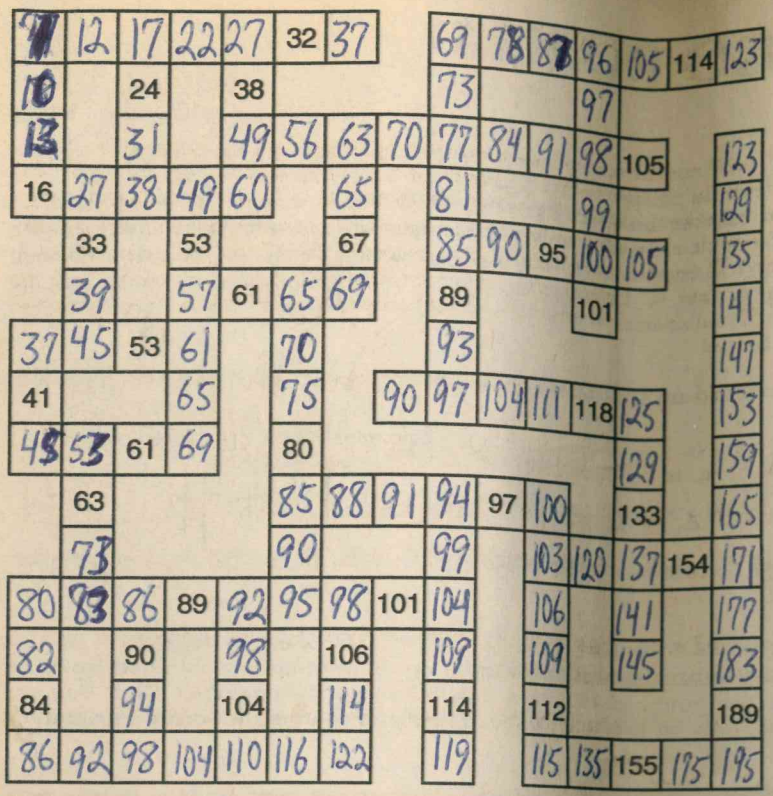
Need help solving Logic Problems, Word Arithmetic, or Cross Sums? Why not send for free leaflets that offer detailed instructions and helpful hints on how to solve these puzzles? Just write to the appropriate department (LP for Logic Problems, WA for Word Arithmetic, and XS for Cross Sums), enclosing a stamped, self-addressed envelope (long-letter size, please) for each leaflet wanted. Write to: Department —, Dell Math Puzzles and Logic Problems, Department —, Dell Magazines Direct, 6 Prowitt St., Norwalk, CT 06855-1220.



## NUMBER FILL-IN

**In this puzzle, the numbers to be entered into each row across and each column down will form a numerical sequence with the numbers already in the diagram. For example, if you saw the numbers 5, ?, 15 already in the puzzle, you could figure out that the missing number is 10, and the sequence involves adding 5 to each number to get the next number. The sequences always increase from LEFT to RIGHT and from TOP to BOTTOM. See if you can figure out each sequence and fill in all the missing numbers.**

**Solution is on page 66.**

## NUMERABILITY

**See if you can figure out how the boxed given numbers in each problem must be placed into the larger empty squares so that, using the correct arithmetic signs (to be placed into the smaller squares), you will arrive at the given solution. Addition, subtraction, multiplication, and division can be used as needed. The example below shows how the numbers 1, 2, 3, and 12 were entered into the empty squares, along with three arithmetic signs to reach the solution of 21. All types of arithmetic will not necessarily be used in every problem, and there are no fractions.**

**Answers are on page 65.**

Example

[1] [2] [3] [12]

□ □ □ □ □ □ □ = [21]

Solution

[12] [÷] [2] [+] [1] [x] [3] = [21]

1. [5] [8] [13] [17]

□ □ □ □ □ □ □ = [14]

2. [3] [8] [15] [22]

□ □ □ □ □ □ □ = [3]

3. [3] [14] [17] [20] [25]

□ □ □ □ □ □ □ □ □ = [8]

4. [3] [12] [4] [17] [25]

□ □ □ □ □ □ □ □ □ = [5]

5. [2] [6] [3] [17] [15]

□ □ □ □ □ □ □ □ □ = [13]

# BINGO PLAYS 1

by Linda Thistle

**In this puzzle, you are trying to fill your "card" with numbers and make a winning Bingo game. Just as in Bingo, each column has limits set for the numbers that can be placed in that column, as shown at the top of the card. For example, in column B, every square will have a number between 1 and 15 inclusive; in column N, every number will be between 31 and 45 inclusive. Use the given clues to eliminate possibilities within those limits until you can enter one final number in each square. A number will appear only once in any column. The "free" space in the center of the card is just that; you need not enter a number in that square. After you have filled in your card, find the Bingo winning combination: Just as in Bingo, the five numbers in one row, column, or diagonal will fit the clues given. Circle these numbers and you have won the game!**

1. The number one does not appear on the card as a single-digit number, nor does it appear in row Y or square PN, LG, AG, SB, or SO.
2. The number two does not appear in row P, A, or S, or square LB, LI, LG, LO, or YN.
3. The number three does not appear in row P, A, or Y, column B, or square LI, LG, or SO.
4. The number four does not appear in row L, column O, square PB, PG, AB, YI, or SN, or in the winning combination.
5. The number five does not appear on the card as a single-digit number, nor does it appear in row Y or S, square PG, LB, LN, or AO, or in the winning combination.
6. The number six does not appear on the card as a single-digit number, nor does it appear in row Y or square LN, LG, AG, SN, or SO.
7. The number seven does not appear on the card as a single-digit number, nor does it appear in square PI, PO, LN, LO, AI, AO, YI, or SN.
8. The number eight does not appear in column G or square PI, PO, LB, LN, LO, AB, AO, YB, YI, SB, or SN.
9. The number nine does not appear on the card as a single-digit number, nor does it appear in row L, A, or S or square PI, PO, or YG.
10. Zero does not appear in square PB, LB, LG, AB, AG, or YI.
11. The number 11 is the only same-digit double-number combination on the card.

| | B<br>1 - 15 | I<br>16 - 30 | N<br>31 - 45 | G<br>46 - 60 | O<br>61 - 75 | |
|---|---|---|---|---|---|---|
| P | | | | | | P |
| L | | | | | | L |
| A | | | FREE | | | A |
| Y | | | | | | Y |
| S | | | | | | S |
| | B | I | N | G | O | |

**Solution is on page 60**

# WORD ARITHMETIC

**These are long-division problems in which letters are substituted for numbers. Solve the problem; determine the number value of each letter; and, when the letters in each one have been arranged in order from 0 to 9, they will spell out a word or words.**

**Answers are on page 65.**

**1.** BAD POSTURE

0 1 2 3 4 5 6 7 8 9

```
          136
          APT
616 | 84156
TAT | ROAST
      616
      TAT
      2253
      DDSS
      1848
      ARAR
       4076
       OBUT
       3696
       PTET
        380
        PRB
```

**2.** NIGHTMARES

0 1 2 3 4 5 6 7 8 9

```
          3617
          HAIR
262 | 947865
GAG | STREAM
      986
      REA
      1618
      IAIE
      1572
      IMRG
       466
       TAA
       262
       GAG
       2045
       GNTM
       1834
       IEHT
        211
        GII
```

**3.** DREAMS OF IT

0 1 2 3 4 5 6 7 8 9

```
          731
          FAR
1345 | 984215
RAMS | TIMERS
       9415
       TMRS
       4271
       MEFR
       4035
       MDAS
        2365
        EAOS
        1345
        RAMS
        1020
        RDED
```

Are they in St. Louis now?

**4.** GOLDBRICKS

0 1 2 3 4 5 6 7 8 9

```
          123
          OLD
3658 | 451629
DIRK | BROILS
       3658
       DIRK
       8582
       KRKL
       7316
       CDOI
       12669
       OLIIS
       10974
       OGSCB
        1685
        OISR
```

**5.** ARITZYGOWN

0 1 2 3 4 5 6 7 8 9

```
          801
          WAR
8123 | 6510377
WRIT | GYRATOR
       64984
       GZNWZ
        11971
        RBNOR
         8123
         WRIT
         3848
         TWZW
```

**6.** SCORINGPAD

0 1 2 3 4 5 6 7 8 9

```
          741
          PIC
126 | 93470
COG | DRIPS
      882
      AAO
       527
       NOP
       504
       NSI
        230
        ORS
        126
        COG
        104
        CSI
```

**7.**

0 1 2 3 4 5 6 7 8 9

```
          NO
ONLY | LOCALE
       LLCEN
        LRNAE
       ESRHL
        LOAH
```

**8.**

0 1 2 3 4 5 6 7 8 9

```
          SAD
SAD | DAILY
      ANS
       NEAL
      NSLU
       NILY
      NATD
       SAT
```

**9.** H

0 1 2 3 4 5 6 7 8 9

```
          JAN
WOE | SHINES
      IOJO
       SNIE
      SJIB
       WHJS
      ABJS
       AHH
```

# FIGURE LOGIC 1

by Linda Thistle

**Solve Figure Logic by completing some simple arithmetic problems, which will enable you to move from clue to clue through the puzzle. You will not always be able to complete an entire number at first, but you may be able, by logic, to determine what one or more of the digits must be. If you enter those digits into the diagram, they may help you to solve other clues, and you can eventually return to the unfinished numbers and finally complete them.**

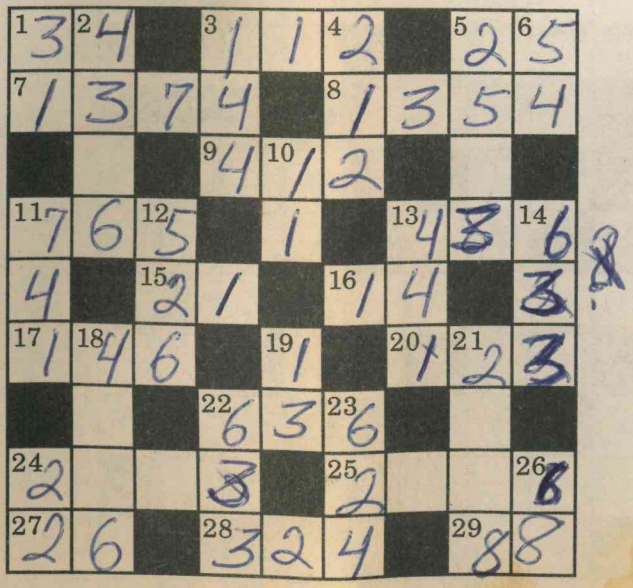
**A starting help is given on page 65.**

## ACROSS

1. One-half of 26-Down
3. Digits of 20-Across rearranged
5. 16-Across plus 10-Down
7. 11-Down plus 14-Down
8. Twenty less than 7-Across
9. Twenty less than 3-Across
11. Consecutive digits in descending order
13. 3-Across plus 28-Across
15. Ten less than 1-Down
16. One more than 19-Down
17. Five hundred less than 23-Down
20. Consecutive digits in ascending order
22. Three times 4-Down
24. Five less than 21-Down
25. Two times 24-Across
27. Two times 19-Down
28. 3-Down plus 4-Down
29. Eight times 10-Down

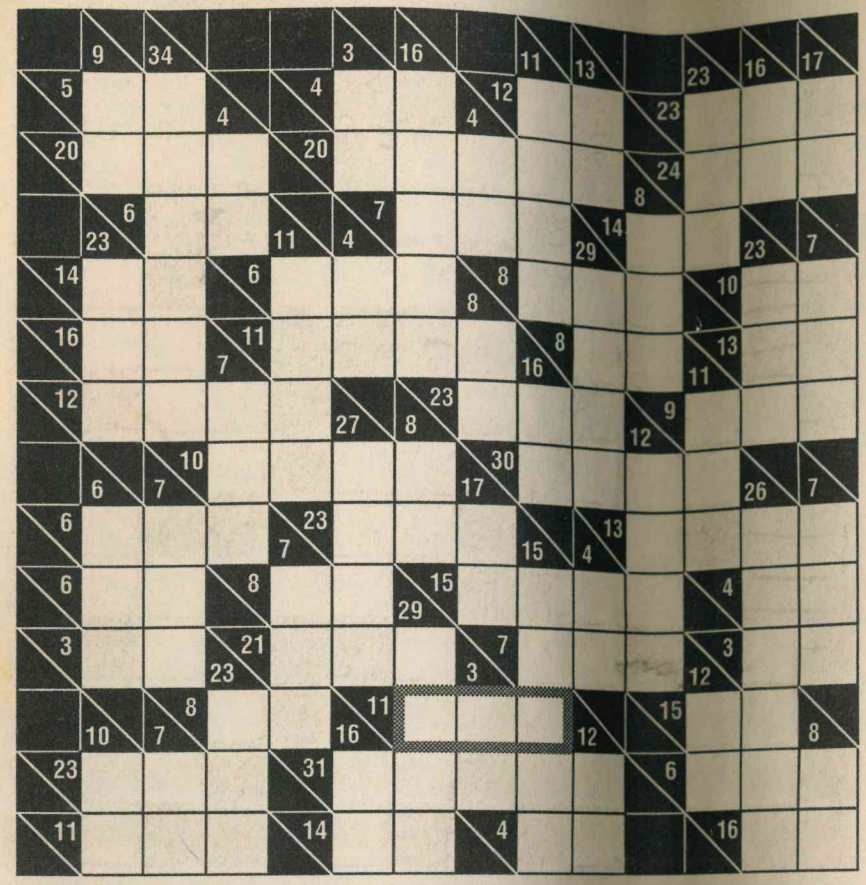
## DOWN

1. Three less than 1-Across
2. Four hundred less than 25-Across
3. Two less than 17-Across
4. Eighty more than 3-Across
5. Two times 8-Across
6. Twenty more than 1-Across
10. One-half of 24-Down
11. Six hundred more than 3-Down
12. Four hundred more than 20-Across
13. Three hundred less than 11-Down
14. One hundred less than 22-Down
18. Thirty more than 2-Down
19. Digits of 1-Down reversed
21. Two hundred less than 5-Down
22. 11-Across minus 3-Across
23. Ten more than 22-Down
24. One more than 15-Across
26. Twenty less than 29-Across



**Solution is on page 60**

# CROSS SUMS

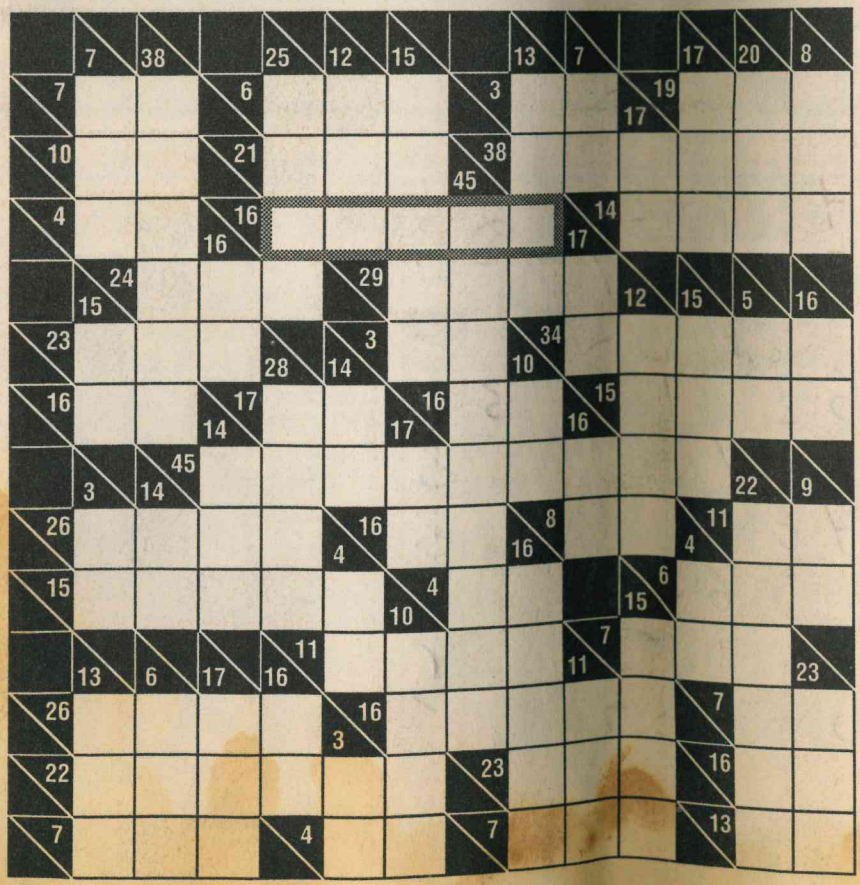


## NUMBER 1

**In these puzzles, the numbers in the black squares refer to the SUMS of the digits that you are to fill into the empty spaces. The number ABOVE the diagonal line refers to the empty spaces directly to the RIGHT of that number. A number BELOW the diagonal line refers to the empty spaces directly BELOW that number.**

**No zeros are used here, only the digits one through nine. An important point: A digit cannot appear more than once in any particular digit combination. We have outlined one area in each diagram. If you need help starting a puzzle, the digit combination to go into that area is listed on page 65.**

**Solutions are on page 59.**



## NUMBER 2

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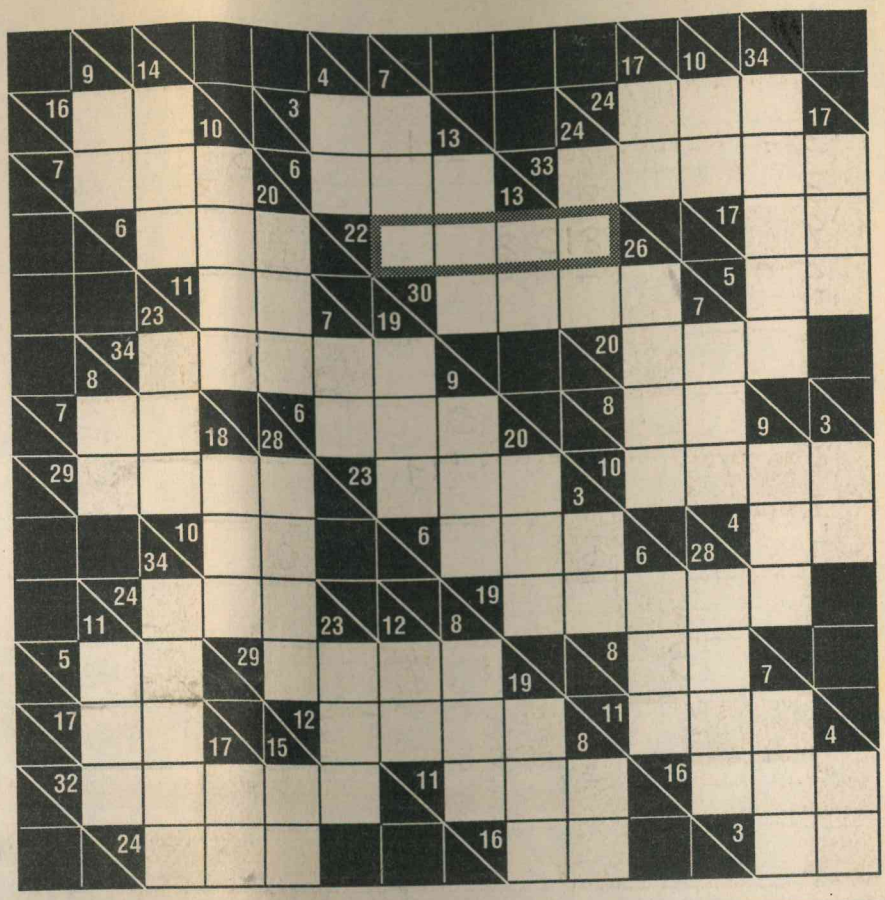
# CROSS SUMS

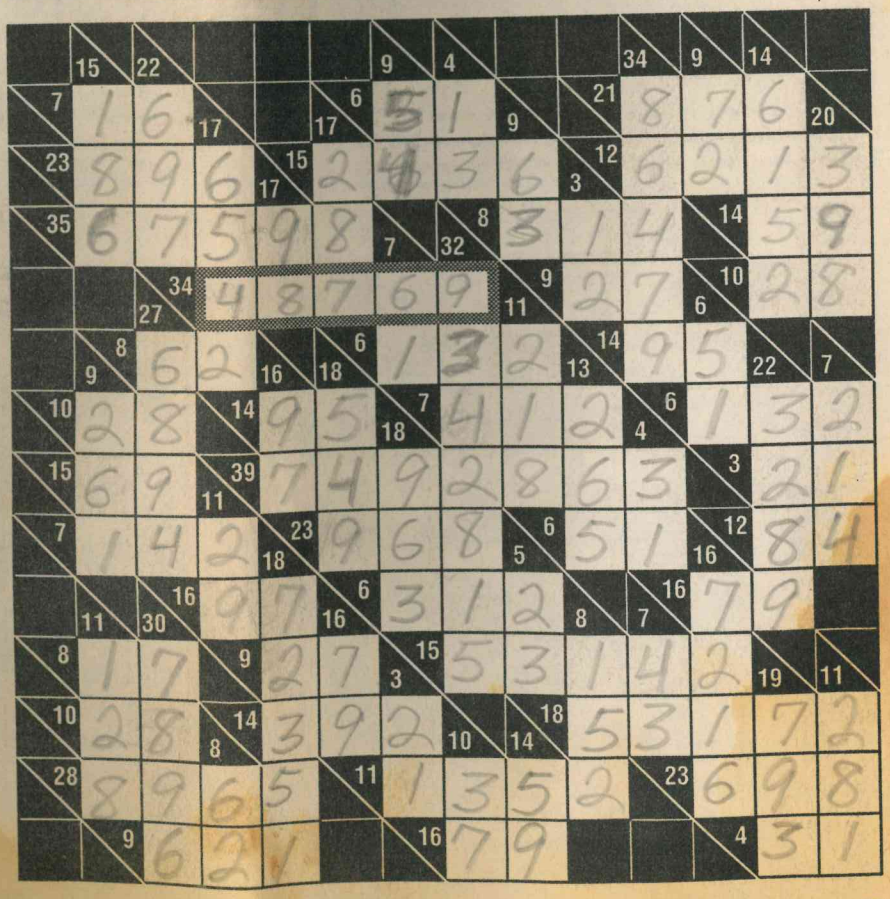
## NUMBER 3



*Starting helps are on page 65.*

**Solutions are on page 59.**

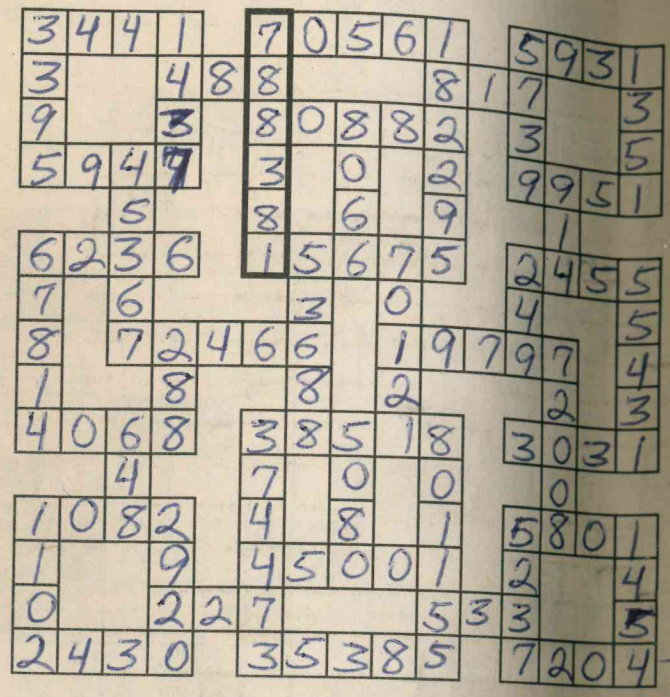
## NUMBER 4



# KROSS NUMBER KRISS KROSS

**Fit the number combinations supplied with the diagram into their proper places in the puzzle squares. The combinations are in numerical order according to length. If you need help starting this puzzle, the number to be entered into the outlined area can be found on page 65.**

**Solution is on page 66.**



**3 Digits**

~~227~~
~~249~~
~~288~~
~~488~~
~~533~~
~~648~~
~~817~~
~~914~~

**4 Digits**

~~1082~~
~~1102~~
~~1351~~
~~1437~~
~~1454~~
~~2430~~
~~2455~~
2920

~~3031~~
~~3395~~
~~3441~~
~~4068~~
5080
~~5237~~
~~5739~~
~~5801~~
~~5931~~
~~5947~~
~~6236~~
~~7204~~
8066
9951

**5 Digits**

~~15675~~
19797
35385

~~38518~~
~~45001~~
~~45367~~
~~53688~~
~~55431~~
~~67814~~
~~70121~~
~~70561~~
~~72008~~
~~72466~~
~~80882~~

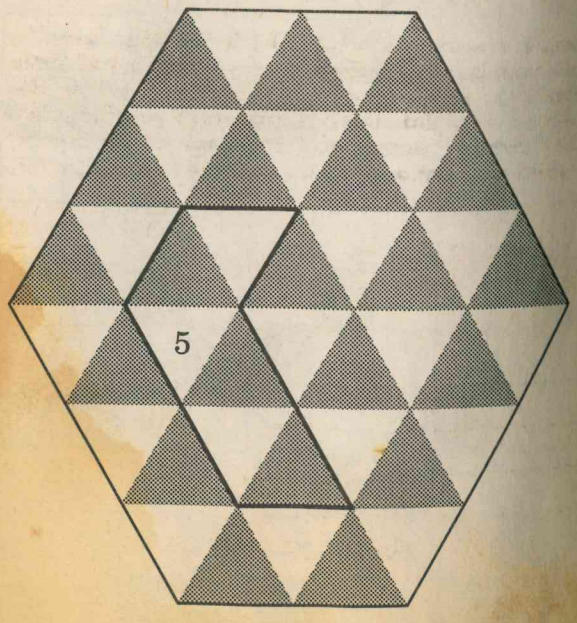
**6 Digits**

~~182295~~
~~374473~~
~~788381~~
~~801155~~

# TRACE ELEMENTS

**Within the boundaries of the shape on the left, draw the outlines of the six figures described below. Do this by following the lines formed by the triangles within the shape. The figures you draw may be odd shapes — for example, a 6-sided figure doesn't have to be a hexagon. When you've finished, the six figures should fill the large shape exactly; they may not overlap each other or fall outside the boundaries of the shape. We've started you off by showing you where Shape #5 is located.**

**Solution is on page 62.**



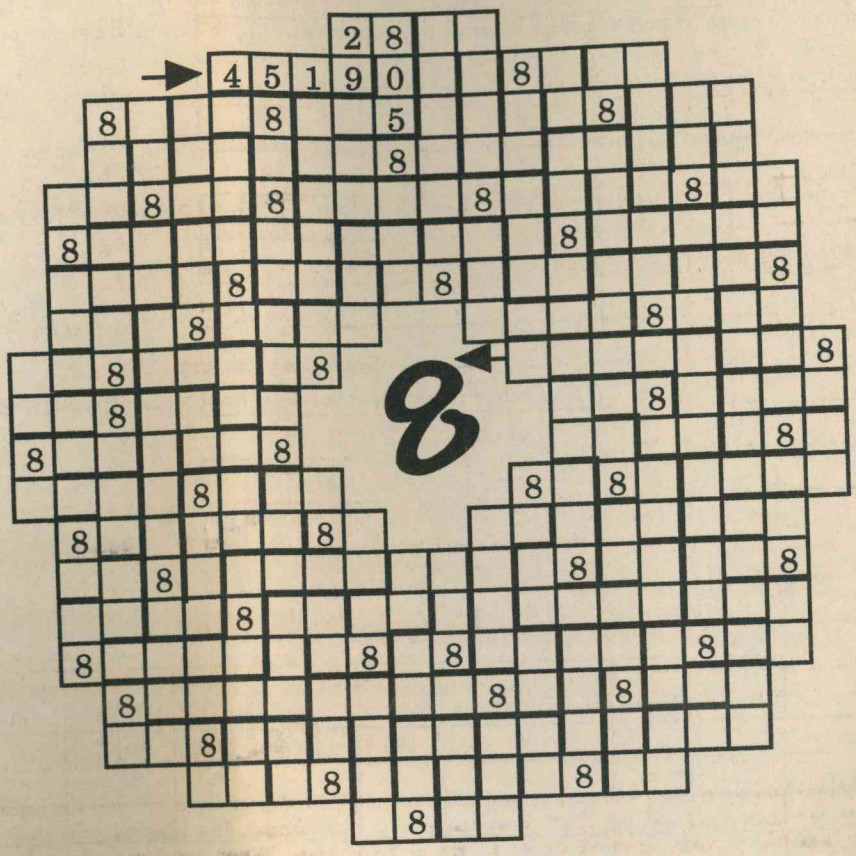

1. A 4-sided figure that encloses 8 triangles. It has more triangles in the top row than any other figure.
2. A 6-sided figure that encloses 10 triangles.
3. A 6-sided figure that encloses 6 triangles. It has more triangles in the bottom row than any other figure.
4. A 5-sided figure that encloses 5 triangles.
5. A 6-sided figure that encloses 6 triangles.
6. A 4-sided figure that encloses 7 triangles. It has more triangles in more rows than any other figure.

# EIGHT BALL

Starting at the arrow near the top of the eight ball, see if you can wend your way to the arrow pointing to the 8 by entering the given numbers into the diagram in a continuous chain; that is, the last digit of each entry is the first digit of the next. The correct route through the diagram is marked by heavy lines. All of the 8s have been entered for you, as has the first number in the chain.

Solution is on page 64.

| | |
|---|---|
| 00289304 | 52867908 |
| 04268294 | 56201810 |
| 06089518 | 58400490 |
| 07312922 | 61956875 |
| 08518506 | 68092181 |
| 10486969 | 68629613 |
| 10845066 | 74002928 |
| 12049053 | 74825392 |
| 18208732 | 78012633 |
| 19108290 | 78420683 |
| 20823839 | 79345851 |
| 25938400 | 80981036 |
| 29319547 | 82603158 |
| 33150180 | 82901527 |
| 38123843 | 83714287 |
| 39531794 | 83970817 |
| 39830728 | 85113039 |
| 39834951 | 87190621 |
| 41890418 | 91597078 |
| ~~45102805~~ | 91938941 |
| 45379385 | 98234147 |




# FOUR SCORE

You probably know that a score is equal to twenty and, therefore, four score equal 80. That's the idea here. In each of the puzzles below, using only the 10 letters given — each with its numerical value — form four 4-letter words on the dashes provided. Form these words in such a way that by adding their numerical values together, the grand total for the four words is exactly 80 points. You may use a letter more than once in any word you form. Try to form only everyday words; proper names, contractions, obsolete, archaic, dialect, and slang words are not allowed.

Our answers, which may not agree with yours, are on page 65.

1. K E V R C L I S Y F
   1 2 3 4 5 6 7 8 9 10

| | Score |
|---|---|
| ____ | ____ |
| ____ | ____ |
| ____ | ____ |
| ____ | ____ |
| Total: | 80 |

2. D N A L R E B M I T
   1 2 3 4 5 6 7 8 9 10

| | Score |
|---|---|
| ____ | ____ |
| ____ | ____ |
| ____ | ____ |
| ____ | ____ |
| Total: | 80 |

# LOGIC PROBLEM

## 2. THE POETRY CONTEST

**by Margaret Edmiston**

Ms. Allen's fifth-grade English class recently participated in a poetry writing contest. Each child in the class was asked to write a short poem on a favorite subject. Ms. Allen and two other teachers awarded first, second, third, fourth, and fifth prizes based on their ratings of the poems. From the clues that follow, can you determine each prize winner's full name (one first name is Louise and one last name is Olsen), the poem each child wrote (one poem was "I Love Clowns"), and the prize each won?

1. The Lawter boy got first prize with his poem, "Summer Fun."

2. Mary placed just ahead of the Newell child, who placed just ahead of the child whose poem was called "My Mom."

3. George placed just ahead of the Peters child, who placed just ahead of Eddie, whose poem was called "The Moon."

4. The Mann child, who is not Jane and did not write "My Dog," got fifth prize.

**Solution is on page 61.**
**See page 5 for directions on how to use the solving chart.**

| | Lawter | Mann | Newell | Olsen | Peters | I Love Clowns | My Dog | My Mom | Summer Fun | The Moon | 1st | 2nd | 3rd | 4th | 5th |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Eddie | | | | | | | | | | | | | | | |
| George | | | | | | | | | | | | | | | |
| Jane | | | | | | | | | | | | | | | |
| Louise | | | | | | | | | | | | | | | |
| Mary | | | | | | | | | | | | | | | |
| 1st | | | | | | | | | | | | | | | |
| 2nd | | | | | | | | | | | | | | | |
| 3rd | | | | | | | | | | | | | | | |
| 4th | | | | | | | | | | | | | | | |
| 5th | | | | | | | | | | | | | | | |
| I Love Clowns | | | | | | | | | | | | | | | |
| My Dog | | | | | | | | | | | | | | | |
| My Mom | | | | | | | | | | | | | | | |
| Summer Fun | | | | | | | | | | | | | | | |
| The Moon | | | | | | | | | | | | | | | |

Fuji - Page 11
Japan - Page 16
Cynthia Cooper - Page 33

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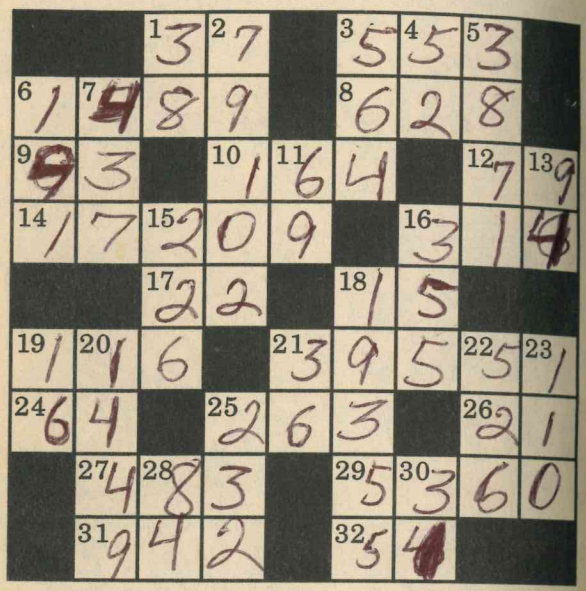
# FIGURE LOGICS 2 & 3

by Linda Thistle

If you need help starting these puzzles, starting helps are given on page 65.



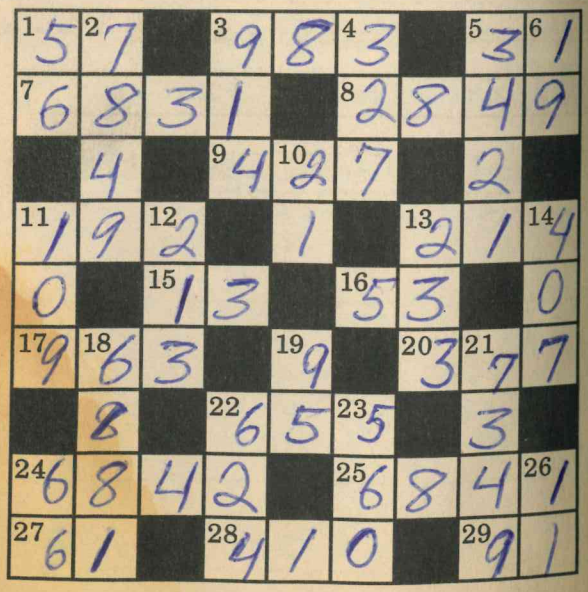
### ACROSS

1. One more than 21-Down
3. Seven times 12-Across
6. Forty more than 20-Down
8. 24-Across plus 3-Down
9. One less than 13-Down
10. Eighty more than 28-Down
12. 18-Across plus 24-Across
14. Digits of 2-Down rearranged
16. One-half of 8-Across
17. 1-Across minus 18-Across
18. 28-Down minus 11-Down
19. 15-Down minus 23-Down
21. Digits of 18-Down rearranged
24. Four times 19-Down
25. 1-Across plus 15-Down
26. One less than 17-Across
27. Seventy less than 3-Across
29. 6-Across plus 5-Down
31. Three times 16-Across
32. Two more than 4-Down

### DOWN

1. 32-Across minus 19-Down
2. Two times 21-Across
3. Four hundred more than 10-Across
4. Thirty more than 17-Across
5. Seven times 3-Across
6. 8-Across minus 7-Down
7. 3-Across minus 19-Across
11. Ten less than 12-Across
13. Forty more than 32-Across
15. Three hundred less than 22-Down
16. 10-Across plus 6-Down
18. Five times 5-Down
19. One more than 18-Across
20. Three times 27-Across
21. Twenty more than 19-Down
22. Two times 25-Across
23. 10-Across minus 32-Across
25. Two times 19-Across
28. Four times 26-Across
30. Fifty less than 28-Down

---



### ACROSS

1. Four less than 27-Across
3. One-seventh of 18-Down
5. Digits of 15-Across reversed
7. Ten less than 25-Across
8. Seven times 14-Down
9. Seven times 27-Across
11. 12-Down minus 10-Down
13. One more than 12-Down
15. Two more than 26-Down
16. 24-Down minus 15-Across
17. Twenty less than 3-Across
20. Fifty more than 4-Down
22. 19-Down plus 23-Down
24. Two times 5-Down
25. One less than 24-Across
27. Thirty less than 29-Across
28. 22-Down minus 13-Across
29. Seven times 15-Across

### DOWN

1. Ten less than 24-Down
2. Five thousand more than 8-Across
3. Seven hundred more than 13-Across
4. Three times 11-Down
5. Consecutive digits rearranged
6. One-fifth of 19-Down
10. Two more than 6-Down
11. 16-Across plus 1-Down
12. Twenty less than 13-Down
13. 23-Down minus 4-Down
14. Twenty less than 9-Across
18. Fifty more than 7-Across
19. Four more than 29-Across
21. Five hundred less than 2-Down
22. 22-Across minus 5-Across
23. Ten times 1-Down
24. Six times 26-Down
26. Ten less than 10-Down

Solutions are on page 60

# LOGIC PROBLEM

by Lois K. Bohnsack

## 3. SPORTSMEN

Al, Benny, Chuck, Don, and Eddie grew up in the same neighborhood of Chicago. All five of the boys were athletic, but no two of the boys excelled at the same sport. Upon completion of college, each signed a contract with a professional sports team. One signed to play baseball. From the clues below, can you determine each athlete's full name (the surname of one is Palmer) and the sport he plays as a professional?

1. The five professional athletes are: Eddie, Al, Mr. Roper, Mr. Tolleson, and the hockey player.
2. Mr. Quick always enjoyed watching the guys play basketball and soccer, but he doesn't play either himself.
3. In the old neighborhood, because Benny lived next door to the Tollesons, he used to eat dinner there on occasion.
4. Eddie is not the one who is a defensive lineman for a football team.
5. Neither Mr. Roper nor Chuck plays soccer.
6. The hockey player, Al, and Mr. Quick all play for teams in the New York area.
7. Chuck and Mr. Sands both graduated from the same college.
8. Al is not the basketball guard or the soccer goalie.

**Solution is on page 61.**

**See page 5 for directions on how to use the solving chart.**

| | Palmer | Quick | Roper | Sands | Tolleson | baseball | basketball | football | hockey | soccer |
|---|---|---|---|---|---|---|---|---|---|---|
| Al | | | | | | | | | | |
| Benny | | | | | | | | | | |
| Chuck | | | | | | | | | | |
| Don | | | | | | | | | | |
| Eddie | | | | | | | | | | |
| baseball | | | | | | | | | | |
| basketball | | | | | | | | | | |
| football | | | | | | | | | | |
| hockey | | | | | | | | | | |
| soccer | | | | | | | | | | |

# WORD ARITHMETIC

Solving directions are on page 8. Answers are on page 65.

**10.** PALEORCHID

0 1 2 3 4 5 6 7 8 9

```
      128
      ALI
790 | 95103
HOP | DRAPE
    790
    HOP
    2110
    LAAP
    1480
    AOIP
    6303
     CEPE
     5920
     RDLP
      383
       EIE
```

**11.** YOURCLIENT

0 1 2 3 4 5 6 7 8 9

```
      129
      OUT
756 | 92813
ELI | TENOR
    756
    ELI
    2221
    UUUO
    1512
    OLOU
    7093
     EYTR
     6804
     INYC
      289
       UNT
```

**12.** PRATINCOLE

0 1 2 3 4 5 6 7 8 9

```
        4537
        INTO
6988 | 31604628
CELL | TROPICAL
     27952
     AOENA
     37526
     TONAC
     34940
     TIEIP
      25862
      ANLCA
      20964
      APECI
       48988
       ILELL
       48916
       ILERC
          72
          OA
```

**13.** BANKRUPTCY

0 1 2 3 4 5 6 7 8 9

```
      12
      AN
6127 | 74583
PANT | TRUCK
     6127
     PANT
     13313
     AKKAK
     12254
     ANNUR
      1059
      ABUY
```

**14.** PR

0 1 2 3 4 5 6 7 8 9

```
      TOT
1   | 101
CURE | CREEPER
     0
     CPEMC
     10
     RPREE
       BNCU
       CCUCR
       0
       CPEMC
        OBEN
```

**15.** NICEFAVORS

0 1 2 3 4 5 6 7 8 9

```
        358
        EAR
2709 | 97938
CONS | SOCCER
     8127
     RICO
     15953
     IASAE
     13545
     IEAFA
      24088
      CFNRR
      21602
      CIVOC
       2416
       CFIV
```

He's laughing!

**16.**

0 1 2 3 4 5 6 7 8 9

```
      EACH
NEST | TREATER
     RSLR
     LACST
     LEIII
      EREER
      ESSSN
       EHIN
```

**17.**

0 1 2 3 4 5 6 7 8 9

```
      NOR
RIG | TRIBE
    FFB
    KIB
    KNO
     RFE
     RIG
      F
```

**18.**

0 1 2 3 4 5 6 7 8 9

```
      AM
RANK | ABSORB
     LKKOM
     OKSSB
     FRMRA
      RLLM
```

# BLACK MAGIC

Blacken in exactly ten of the empty squares in each grid below in such a way that each numbered square accurately indicates how many immediately adjacent squares are black. For example, a square containing "3" indicates that three and only three of the adjacent squares, moving horizontally, vertically, or diagonally, are black. It may be helpful to mark any square that you decide is not black with "0."

Solutions are on page 60.

1.

| | | | | | | |
|---|---|---|---|---|---|---|
| 2 | | 3 | 3 | | 1 | |
| | 0 | | | | | |
| | | | 2 | | 4 | |
| | | | | | 4 | |
| | | | | 0 | | |
| | | | | | 2 | |

2.

| | | | | | | |
|---|---|---|---|---|---|---|
| | | 0 | | 0 | | |
| | 2 | | | | 2 | |
| | 1 | | 3 | | 1 | |
| 0 | | | | | | 0 |
| | | | 3 | | | |
| 2 | | | 2 | | 2 | 1 |
| | 2 | | 0 | | 1 | |

# SUM LOGIC

The object here is to place the numbers surrounding the diagram into its empty boxes in such a way that the five numbers in each row, each column, and each of the two diagonals add up to 97. Numbers cannot be repeated within a row, column, or diagonal. HANDICAP: Each number must be placed in one of the boxes of the row or column outside which it now appears.

Solution is on page 60.

| | 34 | 15 | 4 | 5 | 1 | |
|---|---|---|---|---|---|---|
| 1 | | | | 21 | | 59 |
| 50 | 7 | | | | | 20 |
| 20 | | | 16 | | | 25 |
| 27 | | | | | 46 | 5 |
| 24 | | 1 | | 5 | | 41 |
| | 10 | 2 | 26 | 19 | 6 | |

# CROSS NUMBERS

The idea of Cross Numbers is to arrive at the figures given at the bottom and right-hand column of each diagram by following the arithmetic signs in the order they are given (that is, from left to right and top to bottom). Use only the numbers above each diagram to complete its blank squares.

Solutions are on page 60.

1 2 3 4 5 6 7 8 9

1.

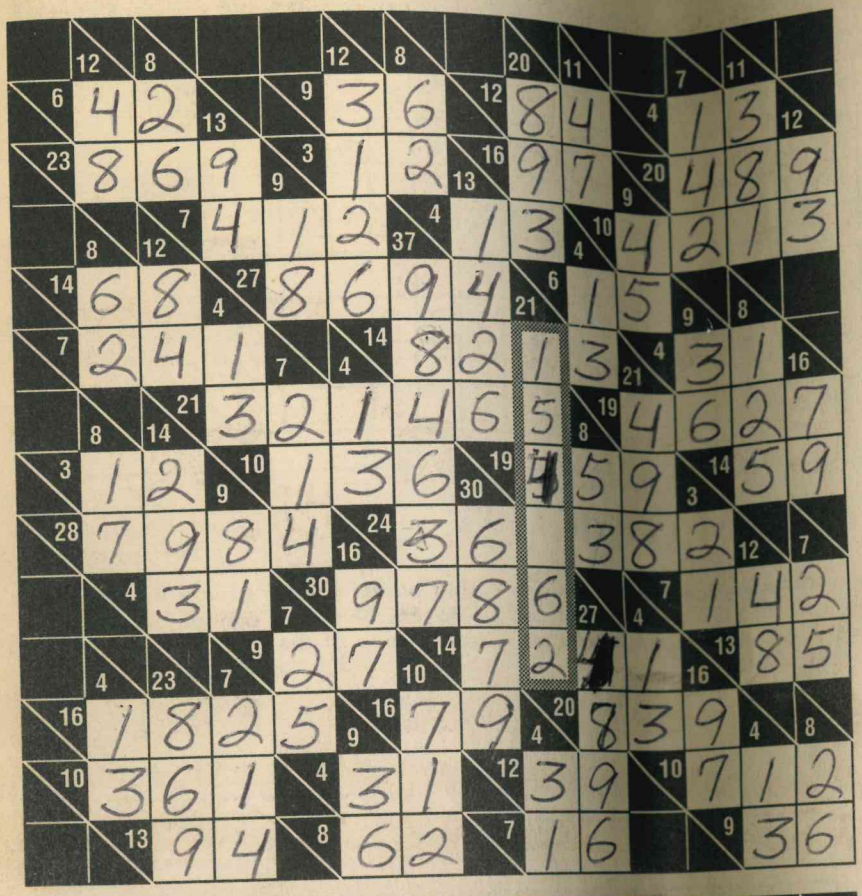
| | | | | | |
|---|---|---|---|---|---|
| | + | | X | | 50 |
| + | | ÷ | | + | |
| | + | | X | | 49 |
| X | | X | | ÷ | |
| | + | | − | | 12 |
| 30 | | 24 | | 6 | |

1 2 3 4 5 6 7 8 9

2.

| | | | | | |
|---|---|---|---|---|---|
| | ÷ | | X | | 21 |
| X | | + | | X | |
| | − | | X | | 15 |
| + | | + | | − | |
| | X | | + | | 20 |
| 29 | | 15 | | 31 | |

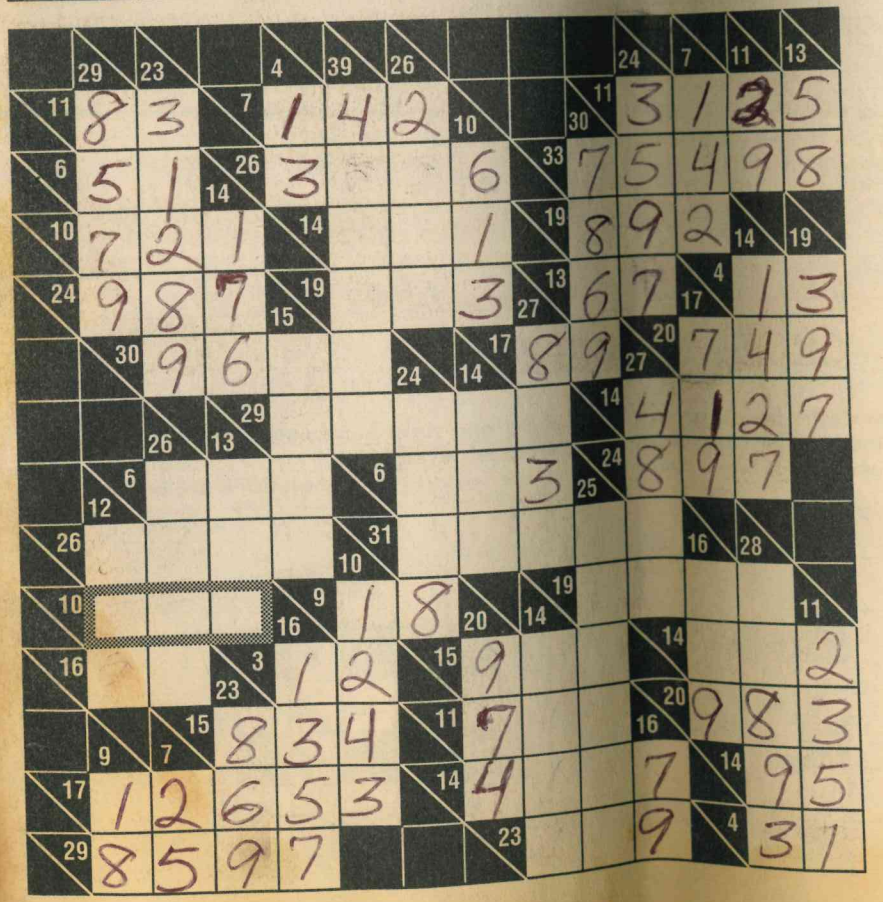
# CROSS SUMS



## NUMBER 5

We have outlined one area in each diagram on these two pages. If you need help starting a puzzle, the digit combination to go into that area is listed on page 65.

Solutions are on page 59.



## NUMBER 6

What date, Crissy?

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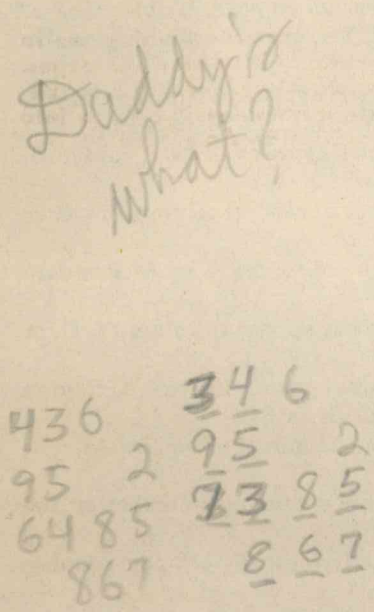
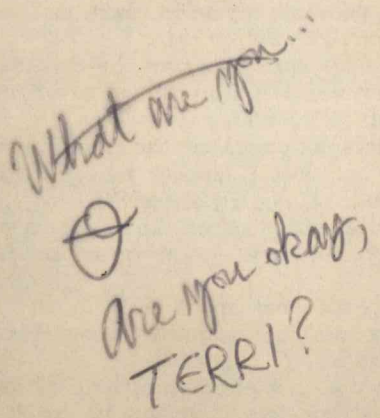
# CROSS SUMS

## NUMBER 7



Solutions are on page 59.

## NUMBER 8



# BINGO PLAYS 2 & 3

by Linda Thistle

| | B<br>1 - 15 | I<br>16 - 30 | N<br>31 - 45 | G<br>46 - 60 | O<br>61 - 75 | |
|---|---|---|---|---|---|---|
| P | 14 | 30 | 38 | 49 | 61 | P |
| L | 15 | 29 | 35 | 50 | 63 | L |
| A | 12 | 22 | FREE | 52 | 65 | A |
| Y | 13 | 17 | 45 | 53 | 67 | Y |
| S | 6 | 20 | 40 | 57 | 69 | S |
| | B | I | N | G | O | |

The winning combination is:
6 17 X 50 61

1. The number one does not appear in row S, column N or G, or square PI, LI, AI, YO.
2. The number two does not appear in row P or Y, column N or O, square LB, LG, or SB, or in the winning combination.
3. The number three does not appear in row A or S, square PO, LI, LG, YN, YO, or in the winning combination.
4. The number four does not appear in row L or A, column O, or square PN, YB, YG, SB, SI, or SG.
5. The number five does not appear in row P, column I, or square YB, YO, SB, or SO.
6. The number six does not appear in column I or G or square PN or LN.
7. The number seven does not in row L or A or square PN, PG, PO, or SI.
8. The number eight does not appear in column I, G, or O.
9. The number nine does not appear in row Y, column N, or square LG, AI, AG, SI, or SG.
10. Zero does not appear in column B or square AI, YN, YO, or SO.
11. The number 6 is the only single-digit number on the card.
12. The number 22 is the only same-digit double-number combination on the card.

---

| | B<br>1 - 15 | I<br>16 - 30 | N<br>31 - 45 | G<br>46 - 60 | O<br>61 - 75 | |
|---|---|---|---|---|---|---|
| P | | | | | | P |
| L | | | | | | L |
| A | | | FREE | | | A |
| Y | | | | | | Y |
| S | | | | | | S |
| | B | I | N | G | O | |

1. The number one does not appear on the card as a single-digit number, nor does it appear in square PG, PO, LN, LO, AO, YB, YN, SB, SI, or SN, or in the winning combination.
2. The number two does not appear on the card as a single-digit number, nor does it appear in row L or A, column G, or square YN, YO, or SO.
3. The number three does not appear in row A or Y, column I or G, or square PO, LN, or LO.
4. The number four does not appear on the card as a single-digit number, nor does it appear in row S, column O, or square PI, PN, or YI.
5. The number five does not appear on the card as a single-digit number, nor does it appear in square PI, PN, LB, LG, AB, AG, YI, YO, SI, SN, or SO.
6. The number six does not appear on the card as a single-digit number, nor does it appear in square AG, YI, YO, or SO.
7. The number seven does not appear on the card as single-digit number, nor does it appear in row P or A, column G, or square LO, YI, SI, or SN.
8. The number eight does not appear on the card as a single-digit number, nor does it appear in row P or square LG, AG, YI, YG, SI, or SN.
9. The number nine does not appear in row S, column I, or square PN, PG, AO, or YG.
10. Zero does not appear in column G, square LN, YO, or SO, or in the winning combination.
11. The number 44 is the only same-digit double-number combination on the card.
12. The number 56 is the only consecutive-digit combination (in either order) on the card.

Solutions are on page 60

# LOGIC PROBLEM

## 4. BOROUGH RIVALRY

by Evelyn Rosenthal

Every year, the City of New York holds a very prestigious science fair. This year, the Klock youngster and four other high-school students won the top five places in the fair. Each of the five is from a different one of the city's five boroughs (all of which are mentioned below). Among the five winners are Bob and the Hanson girl. From the following clues, can you find each student's full name, borough of residence, and final placement at the science fair?

1. The Queens student, who is not Debby, placed higher than Ernest and lower than the Jones youngster, who did not place first.
2. Ann and the first-place student, who is not Marsden, are not from Staten Island.
3. The Bronx student, who is not Cora and did not win first place, placed ahead of the Gray youngster.
4. ~~Debby is not from Brooklyn or Staten Island.~~ That's my ex-girlfriend's name!
5. The Manhattan student placed neither first nor last.
6. Cora did not place first.
7. Neither Ann nor Debby is from the Bronx.

**Solution is on page 61.**
**See page 5 for directions on how to use the solving chart.**

| | Gray | Hanson | Jones | Klock | Marsden | The Bronx | Brooklyn | Manhattan | Queens | Staten Island | 1st | 2nd | 3rd | 4th | 5th |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ann | | • | | | | | | | • | | | | • | | |
| Bob | | | | • | | | • | | | | • | | | | |
| Cora | • | | | | | | | | | • | | | | | • |
| Debby | | | • | | | | | • | | | | • | | | |
| Ernest | | | | | • | • | | | | | | | | • | |
| 1st | | | | • | | | • | | | | | | | | |
| 2nd | | | • | | | | | • | | | | | | | |
| 3rd | | • | | | | | | | • | | | | | | |
| 4th | | | | | • | • | | | | | | | | | |
| 5th | • | | | | | | | | | • | | | | | |
| The Bronx | | | | | • | | | | | | | | | | |
| Brooklyn | | | | • | | | | | | | | | | | |
| Manhattan | | | • | | | | | | | | | | | | |
| Queens | | • | | | | | | | | | | | | | |
| Staten Island | • | | | | | | | | | | | | | | |

Bob Klock · Brooklyn · 1st
Ernest Marsden · The Bronx · 4th
Debby Jones · Manhattan · 2nd
Ann Hanson · Queens · 3rd
Cora Gray · Staten Island · 5th

# SENTENCE ARITHMETIC

by Linda Thistle

**Solve this puzzle as you would a Word Arithmetic (see directions for solving on page 8). Here, though, instead of forming a 10-letter word or words after you've solved the long-division problems, transfer the letters to the coded sentence. It's up to you to insert spaces between the words.**

Solution is on page 65.

| A | B | L | A | C | K | B | E | A | R | C | U | B | T | H | U | M | P | E | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F1 | C2 | B4 | D3 | E6 | C4 | A9 | F7 | E2 | D0 | B0 | A5 | D4 | C3 | B3 | E3 | A0 | F6 | D5 | B5 |

| M | Y | B | A | C | K | D | O | O | R | A | S | H | E | L | O | O | K | E | D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F5 | C1 | B2 | A8 | D1 | E9 | F9 | C7 | B9 | A3 | C0 | E4 | A4 | E7 | C5 | A6 | F4 | B8 | C8 | E0 |

| T | H | R | O | U | G | H | T | H | E | W | I | N | D | O | W | A | T | M | E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A1 | D9 | E1 | D8 | C6 | B1 | F0 | F3 | C9 | B6 | A7 | E5 | F2 | D7 | E8 | F8 | B7 | D2 | D6 | A2 |

**A**

MTERHUOWAB

0 1 2 3 4 5 6 7 8 9

651 OUT

14369 | 9361423 BROTHER

THROB | 96214 AOETH

74002 WHMME

71345 WTAHU

21573 ETUWR

14369 THROB

7204 WEMH

**B**

CGBHLDEAKO

0 1 2 3 4 5 6 7 8 9

166 GEE

2945 | 4908678 LOCKED

BOLD | 2945 BOLD

19636 GOEHE

17670 GAEAC

19665 GOEED

17670 GAEAC

1995 GOOD

**C**

AYBTKLUIEH

0 1 2 3 4 5 6 7 8 9

3048 TAKE

1855 | 5655021 LULLABY

YELL | 5565 LLUL

9002 HAAB

7420 OKBA

15821 YLEBY

14840 YKEKA

981 HEY

Is this a Hawaiian puzzle or what?

**D**

RCTABEHDOH

0 1 2 3 4 5 6 7 8 9

437 BAD

312 | 136503 CAMERA

ACT | 1248 CTBO

1180 CCDR

936 HAM

2343 TABA

2184 TCOB

159 CEH

**E**

DRAUSICEOK

0 1 2 3 4 5 6 7 8 9

1309 RUDE

4829 | 6315834 CURIOUS

SOAK | 4829 SOAK

14868 RSOCO

14487 RSSOE

38134 UORUS

33803 UUODU

4331 SUUR

**F**

HANTONPEWD

0 1 2 3 4 5 6 7 8 9

129 AND

4672 | 604279 PHONED

OPEN | 4672 OPEN

13707 ATEHE

9344 DTOO

4363 OTPTD

42048 ONHOW

1591 AMDA

# FIGURE LOGICS 4 & 5

by Linda Thistle

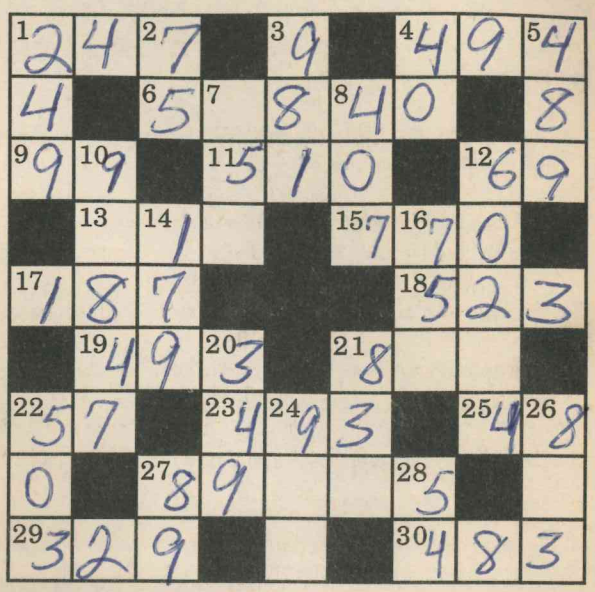
**If you need help starting these puzzles, starting helps are given on page 65.**

### ACROSS

1. Sixty more than17-Across
4. Two times 1-Across
6. Digits of 25-Across and 22-Down scrambled
9. Ten more than 27-Down
11. Seven more than 22-Down
12. Thirty less than 9-Across
13. 3-Down minus 15-Across
15. 1-Across plus 18-Across
17. Eight more than 14-Down
18. Thirty more than 19-Across
19. One less than 4-Across
21. Digits of 3-Down rearranged
22. Nine more than 25-Across
23. Four more than 5-Down
25. Eight more than 4-Down
27. Consecutive digits rearranged
29. Twenty less than 20-Down
30. Ten less than 23-Across

### DOWN

1. Digits of 24-Down reversed
2. Six more than 12-Across
3. Three times 29-Across
4. 9-Across minus 22-Across
5. Three hundred more than 17-Across
7. Two hundred less than 16-Down
8. Eighty less than 5-Down
10. Digits of 1-Across and 27-Down scrambled
12. Digits of 1-Down and 4-Down scrambled
14. Ninety less than 1-Down
16. 24-Down minus 13-Across
20. One hundred more than 1-Across
21. Two times 8-Down
22. Twenty less than 18-Across
24. Two times 30-Across
26. One hundred less than 3-Down
27. One hundred less than 17-Across
28. Three less than 22-Across



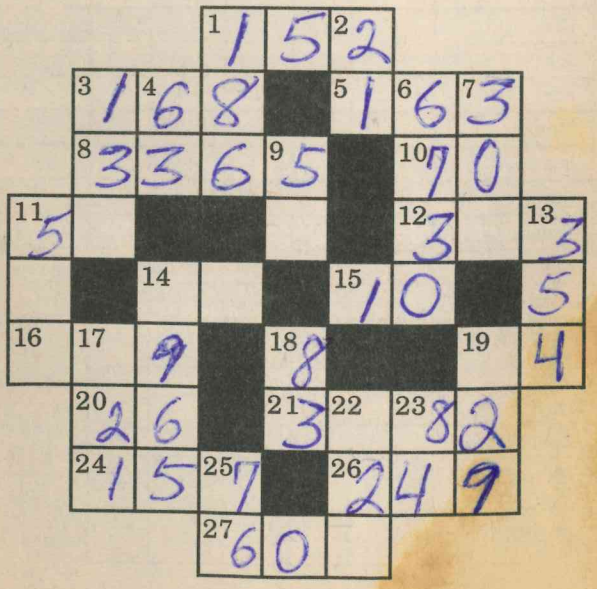
Like this?

### ACROSS

1. Two times 25-Down
3. Eight times 2-Down
5. Six hundred more than 24-Across
8. One-half of 6-Down
10. Six less than 25-Down
11. 20-Across plus 2-Down
12. Two hundred less than 11-Down
14. 25-Down minus 11-Across
15. One-seventh of 10-Across
16. Four less than 12-Across
19. Twenty less than 23-Down
20. Fifty less than 25-Down
21. 5-Across plus 16-Across
24. Five more than 1-Across
26. Three times 18-Down
27. Three times 3-Down

### DOWN

1. Fifty less than 3-Across
2. Four more than 14-Across
3. Forty less than 19-Down
4. Eight more than 15-Across
6. Five times 21-Across
7. Forty more than 27-Across
9. One more than 11-Across
11. One-fifth of 14-Down
13. 3-Across plus 1-Down
14. One hundred more than 8-Across
17. 1-Across plus 27-Across
18. 14-Across plus 4-Down
19. 13-Down minus 22-Down
22. Four less than 26-Across
23. One more than 18-Down
25. 19-Across plus 9-Down



**Solutions are on page 60**

# LOGIC PROBLEM

## 5. HOLIDAY ENJOYMENT

**by Julie Spence**

When Mr. Feld asked his third-grade students what holidays they especially enjoyed, aside from those holidays for which they received gifts or treats, five of his students, including Eric and Suzi, eagerly raised their hands to respond. Each of these five said he or she liked a different holiday, and each gave a different reason why. The holidays these five enjoy are (in no particular order): Mother's Day, Labor Day, Father's Day, Memorial Day, and Independence Day. One of these holidays was chosen because the child's family always goes out to dinner at a fancy restaurant on that day. From the information below, can you determine the full names of the five students (one surname is Strom), the holiday each enjoys, and why each enjoys it? NOTE: Mother's Day is the second Sunday in May; Memorial Day is the last Monday in May; Father's Day is the third Sunday in June; Independence Day is July 4; Labor Day is the first Monday in September.

1. The holiday the Marx child enjoys comes earlier in the year than the holiday that is enjoyed because the child's family goes to the county fair on that day.

2. The holiday the Klos boy enjoys comes earlier in the year than the holiday Amy enjoys, which comes earlier than the holiday enjoyed by the child whose family always goes to the beach for a picnic on that day.

3. The boy who enjoys Memorial Day does so because soon after that school lets out for the summer; he is not Joe.

4. The holiday enjoyed by a child whose family spends the day at the grandparents' farm comes in the month just before the holiday enjoyed by the Wilk child.

5. The holidays enjoyed by Tammy and the Beldon child come in the same month.

**Solution is on page 61.**
**See page 5 for directions on how to use the solving chart.**

| | Beldon | Klos | Marx | Strom | Wilk | Father's Day | Independence Day | Labor Day | Memorial Day | Mother's Day | beach | fair | farm | restaurant | school out |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Amy | | | | | | | | | | | | | | | |
| Eric | | | | | | | | | | | | | | | |
| Joe | | | | | | | | | | | | | | | |
| Suzi | | | | | | | | | | | | | | | |
| Tammy | | | | | | | | | | | | | | | |
| beach | | | | | | | | | | | | | | | |
| fair | | | | | | | | | | | | | | | |
| farm | | | | | | | | | | | | | | | |
| restaurant | | | | | | | | | | | | | | | |
| school out | | | | | | | | | | | | | | | |
| Father's Day | | | | | | | | | | | | | | | |
| Independence Day | | | | | | | | | | | | | | | |
| Labor Day | | | | | | | | | | | | | | | |
| Memorial Day | | | | | | | | | | | | | | | |
| Mother's Day | | | | | | | | | | | | | | | |

# WORD ARITHMETIC

Solving directions are on page 8. Answers are on page 65.

**19.**

0 1 2 3 4 5 6 7 8 9

```
          M I N T
      ┌─────────
P I T │ S T A I N S
      N P I
      ─────
      M L S I
      M M C T
      ───────
        M T T N
        M A N I
        ───────
          P O O S
          M S L L
          ───────
            O N A
```

**20.** ENGLISHBOY

0 1 2 3 4 5 6 7 8 9

```
              3 8 7
              L O B
      ┌─────────────
3 8 1 0 │ 1 4 7 7 3 0 5
L O N E │ N I B B L E S
        1 1 4 3 0
        N N I L E
        ─────────
          3 3 4 3 0
          L L I L E
          ─────────
          3 0 4 8 0
          L E I O E
          ─────────
            2 9 5 0 5
            G Y S E S
            ─────────
            2 6 6 7 0
            G H H B E
            ─────────
              2 8 3 5
              G O L S
```

**21.** INBACKOFUS

0 1 2 3 4 5 6 7 8 9

```
              7 8 1
              F U N
      ┌─────────────
9 0 1 │ 7 0 3 9 4 6
S I N │ F I A S C O
      6 3 0 7
      O A I F
      ───────
        7 3 2 4
        F A B C
        ───────
        7 2 0 8
        F B I U
        ───────
          1 1 6 6
          N N O O
          ───────
            9 0 1
            S I N
            ─────
            2 6 5
            B O K
```

**22.** MO

0 1 2 3 4 5 6 7 8 9

```
          U S
      ┌─────
S U E T │ H E A T S
        C A C E
        1
        ─────
        O U E C S
        D E A U
        ───────
          0 1 1
          S M O O
```

**23.** HEROICDUTY

0 1 2 3 4 5 6 7 8 9

```
              8 4 1
              T I E
      ┌─────────────
2 9 1 │ 2 4 5 0 1 2
R Y E │ R I C H E R
      2 3 2 8
      R O R T
      ───────
        1 2 2 1
        E R R E
        ───────
        1 1 6 4
        E E D I
        ───────
          5 7 2
          C U R
          ─────
          2 9 1
          R Y E
          ─────
          2 8 1
          R T E
```

**24.** PROFITABLE

0 1 2 3 4 5 6 7 8 9

```
              2 1 9
              O R E
      ┌─────────────
8 6 7 │ 1 9 0 2 1 5
L A B │ R E P O R T
      1 7 3 4
      R B F I
      ───────
        1 6 8 1
        R A L R
        ───────
        8 6 7
        L A B
        ─────
        8 1 4 5
        L R I T
        ───────
        8 0 3
        B L P F
        ───────
          3 4 2
          F I O
```

PRABLEM

**25.**

0 1 2 3 4 5 6 7 8 9

```
          E R E
      ┌─────
S E E │ S A B L E S
      S G E I
      ───────
        U I A E
        F U E R
        ───────
          S L U S
          S G E I
          ───────
            R R R
```

**26.** C

0 1 2 3 4 5 6 7 8 9

```
          I N
      ┌─────
I A N │ D E C R Y
      0
      D I X N
      ───────
        A D X Y
        A N N Y
        ───────
          0
          A M C
```

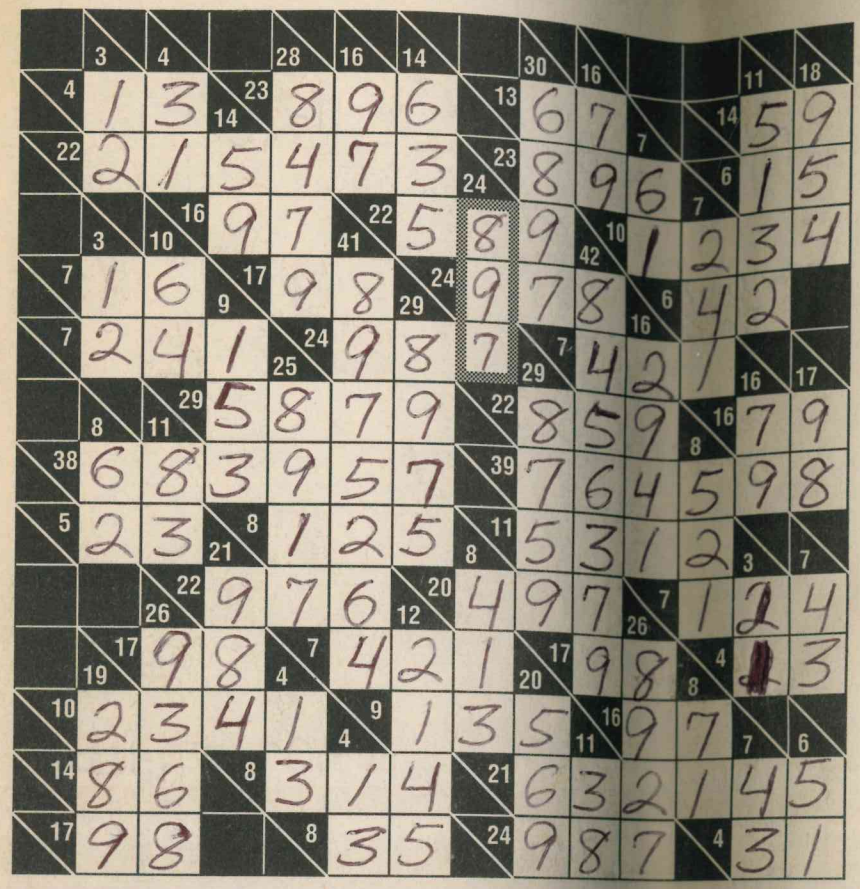
**27.** H

0 1 2 3 4 5 6 7 8 9

```
          M A
      ┌─────
B U L L │ S T E A K
        T M S S
        ───────
        M B T K K
        2 = 0
        M M H H S
        ─ ─ ─ ─ ─
          U T K U
```

No Terri, it's not Rod Stewart!

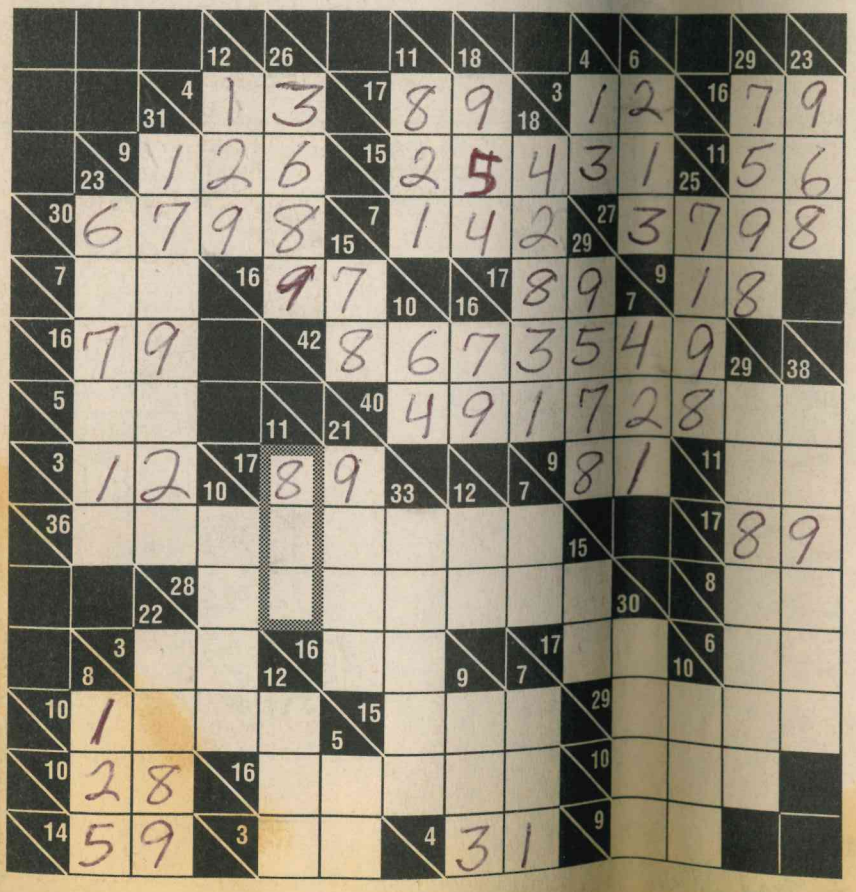
# CROSS SUMS



## NUMBER 9

**We have outlined one area in each diagram on these two pages. If you need help starting a puzzle, the digit combination to go into that area is listed on page 65.**

**Solutions are on page 59.**

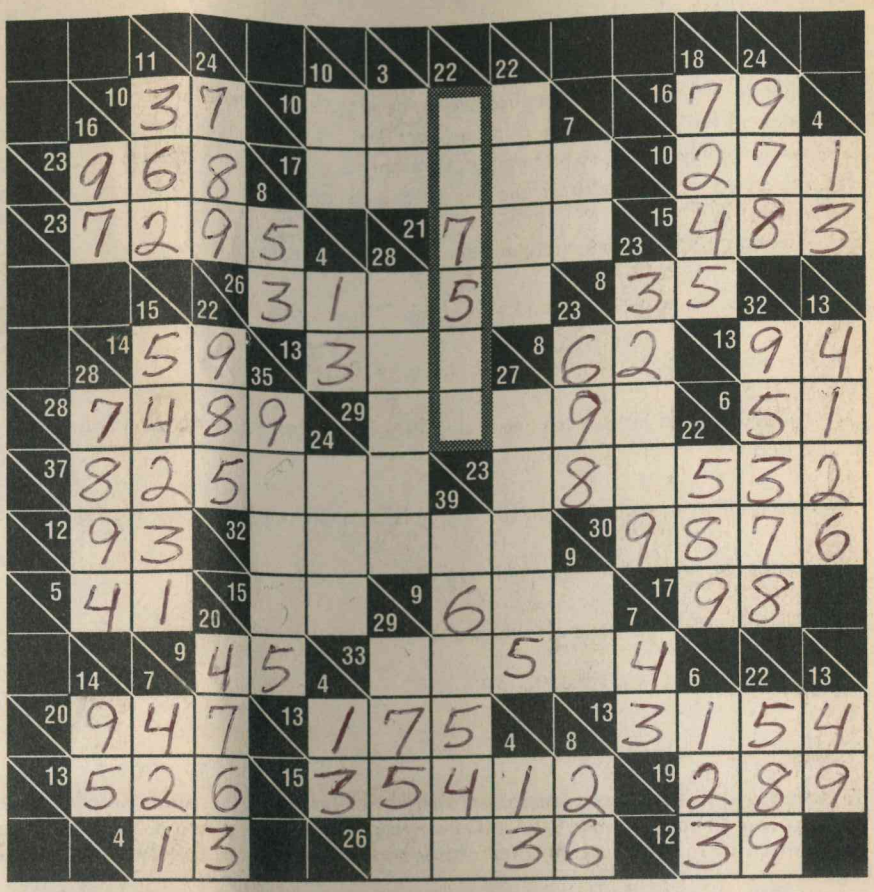


## NUMBER 10

*Add more to your total puzzle enjoyment with* ***Collector's Series Cross Sums.*** *You'll find over 100 of your favorites. To order, see page 15.*

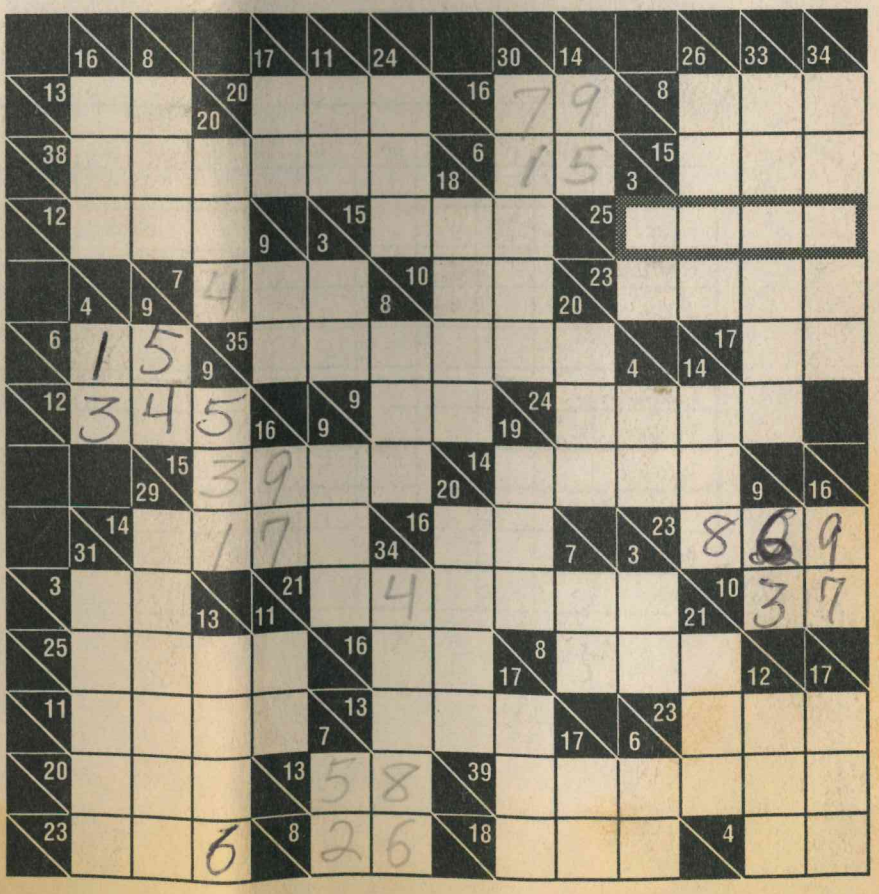
# CROSS SUMS

## NUMBER 11



Solutions are on page 59.

## NUMBER 12



# LOGIC PROBLEM

## 6. NEIGHBORHOOD CATS AND DOGS

**by Margaret Edmiston**

The Chiltons and seven other families live in the eight houses that make up Mayflower Lane, with the even numbers 100 to 106 on the north side of the street and the odd numbers 101 to 107 on the south side of the street, as shown in the illustration below. Some families have only a dog, some families have only a cat, and some families have both a dog and a cat. From the clues below, can you determine each family's address and the pet or pets they own?

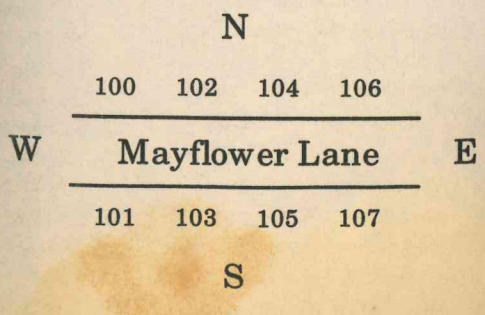
1. Among all the families, there are exactly as many cats as there are dogs.
2. The Jetts live next door to and east of the O'Briens and directly across the street from a family that does not have a cat.
3. The Kanes, who do not own a dog, live at #103.
4. The Byrds, who have a cat and a dog, live in a corner house diagonally opposite to the Parker's corner house. The Parkers have a dog.
5. Two families that do not own cats live in diagonally opposite corner houses.
6. The Byrds' house is further from the O'Briens' than from the Jetts'.
7. The Altons live on the south side of the street, but not at #105 and not directly opposite to the Parkers' house.
8. The Ryders live in a corner house.

**Solution is on page 61.**

**In solving this Problem, we found the chart below to be most helpful. SPECIAL NOTE: You will see, as you solve, that in this Problem, you WILL NOT always be able to place a "no" (X) in all the rest of the boxes in each row and column containing a dot, as there may be more than one family with, for example, only a dog for a pet.**

This just in:
Chuck has found a girlfriend!

| | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | cat | dog | both |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Altons | | | | | | | | | | | |
| Byrds | | | | | | | | | | | |
| Chiltons | | | | | | | | | | | |
| Jetts | | | | | | | | | | | |
| Kanes | | | | | | | | | | | |
| O'Briens | | | | | | | | | | | |
| Parkers | | | | | | | | | | | |
| Ryders | | | | | | | | | | | |
| cat | | | | | | | | | | | |
| dog | | | | | | | | | | | |
| both | | | | | | | | | | | |



# FIGURE LOGICS 6 & 7

by Linda Thistle

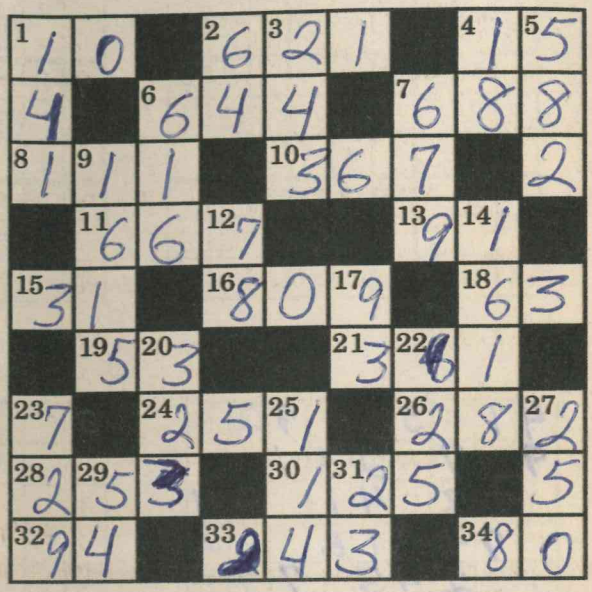
**If you need help starting these puzzles, starting helps are given on page 65.**

### ACROSS

1. 18-Across minus 19-Across
2. 6-Across minus 31-Down
4. 17-Down minus 12-Down
6. Four times 8-Across
7. 2-Across plus 10-Across
8. Three less than 25-Down
10. Three hundred less than 11-Across
11. 24-Across plus 6-Down
13. Three less than 32-Across
15. 8-Across minus 34-Across
16. One-half of 14-Down
18. 12-Down minus 4-Across
19. Thirty more than 31-Down
21. 33-Across minus 5-Down
24. Eight more than 3-Down
26. Two times 1-Down
28. 1-Across plus 3-Down
30. One-half of 27-Down
32. 15-Across plus 18-Across
33. Seven hundred more than 3-Down
34. Eight times 1-Across

### DOWN

1. 18-Across plus 12-Down
2. 29-Down minus 1-Across
3. One-third of 23-Down
4. Five less than 31-Down
5. Three hundred more than 26-Across
6. Five less than 2-Across
7. Thirty less than 16-Across
9. Five times 20-Down
12. Two less than 34-Across
14. Three more than 9-Down
17. Three times 15-Across
20. 10-Across minus 2-Down
22. Five hundred more than 30-Across
23. 16-Across minus 34-Across
25. 10-Across minus 28-Across
27. 21-Across minus 8-Across
29. One more than 19-Across
31. Seventy less than 17-Down



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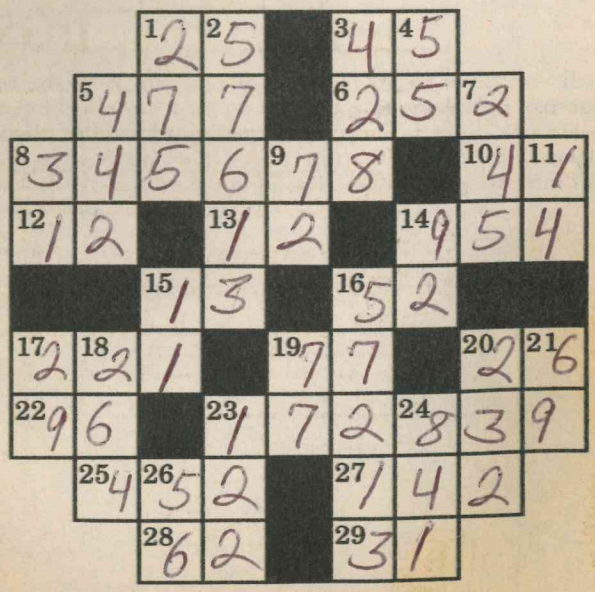
### ACROSS

1. Twenty less than 3-Across
3. Seven less than 16-Across
5. 7-Down plus 20-Down
6. Two hundred less than 25-Across
8. Consecutive digits in order
10. One-half of 14-Down
12. Forty more than 10-Across
13. One-eighth of 22-Across
14. Four times 17-Across
15. One-fourth of 16-Across
16. Two times 20-Across
17. Digits of 23-Down reversed
19. Four less than 12-Across
20. 13-Across plus 11-Down
22. Forty more than 26-Down
23. One-half of 8-Across
25. Ten more than 5-Down
27. Twenty less than 18-Down
28. Ten less than 9-Down
29. One-half of 28-Across

### DOWN

1. 18-Down plus 23-Down
2. One-third of 23-Across
3. 27-Across plus 1-Down
4. One-fifth of 1-Down
5. Five hundred less than 24-Down
7. Seven less than 6-Across
8. 3-Down divided by 15-Down
9. Six times 13-Across
11. One-fourth of 26-Down
14. Thirty less than 23-Down
15. One-seventh of 19-Down
16. Four hundred less than 2-Down
17. Two less than 29-Across
18. 16-Down divided by 25-Across
19. Same as 19-Across
20. Ninety more than 27-Across
21. 29-Across plus 8-Down
23. Two times 26-Down
24. Three less than 14-Across
26. One more than 4-Down



**Solutions are on page 60**

# NUMBER PLACE

**In these puzzles, your job is to place a number into each box so that each row across, each column down, and each small 9-box square within the larger square (there are 9 of these) will contain each number 1 through 9. Remember that no number may appear more than once in any row, column, or 9-box square; this will help you solve the puzzle.**

**Solutions are on page 60.**

**1.**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 3 | | | | 7 | | 1 | | 8 |
| | | 4 | 8 | | 2 | | 5 | |
| 5 | 6 | | 3 | | | 7 | | |
| | 7 | 9 | 5 | | | | | 4 |
| 8 | | | | 2 | 1 | | 3 | |
| | 5 | | | 4 | | 2 | 8 | |
| | 2 | | 4 | 3 | | 8 | | |
| | | 7 | | | 8 | | 2 | 9 |
| 4 | | 1 | | | 9 | | | 3 |

**2.**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2 | | | | | 8 | 7 | 1 | 5 |
| | 7 | 6 | 1 | | | 4 | 3 | 9 |
| 4 | | 9 | | 3 | | 6 | 2 | 8 |
| 9 | 8 | 4 | 5 | 2 | 1 | 3 | 6 | 7 |
| 3 | 5 | 1 | | | 7 | 8 | 9 | 2 |
| 6 | 2 | 7 | 9 | 8 | 3 | 1 | 5 | 4 |
| 2 | 4 | 8 | 3 | 7 | 9 | 5 | 1 | 6 |
| | | 5 | | 1 | | 9 | 7 | |
| 7 | | | | 5 | | 2 | | |

**3.**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2 | 4 | 9 | | | | | 6 |
| | | 5 | | 7 | | 3 | | |
| 3 | | | | | 8 | | 1 | 5 |
| | 1 | | | 8 | | | | 9 |
| 9 | | | | | 6 | 5 | | |
| | | 6 | 3 | | | | 4 | |
| | 6 | | | 5 | | | 2 | |
| 2 | | | 6 | | | 7 | | |
| | 9 | 8 | | | 3 | | | 4 |

**4.**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4 | 1 | 6 | 5 | 8 | 7 | 9 | 2 | 3 |
| 9 | 5 | 7 | 6 | 2 | 3 | 1 | 4 | 8 |
| 3 | 2 | 8 | 9 | 4 | 1 | 6 | 5 | 7 |
| 7 | 9 | 4 | 3 | 1 | 6 | 5 | 8 | 2 |
| 1 | 3 | 2 | 4 | 5 | 8 | 7 | 9 | 6 |
| 6 | 8 | 5 | 2 | 7 | 9 | 4 | 3 | 1 |
| 2 | 7 | 1 | 8 | 9 | 5 | 3 | 6 | 4 |
| 8 | 6 | 9 | 7 | 3 | 4 | 2 | 1 | 5 |
| 5 | 4 | 3 | 1 | 6 | 2 | 8 | 7 | 9 |

**5.**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 5 | 3 | 7 | 9 | 1 | 2 | 4 | 6 | 8 |
| 8 | 4 | 9 | 5 | 6 | 3 | 2 | 1 | 7 |
| 1 | 6 | 2 | 4 | 8 | 7 | 3 | 9 | 5 |
| 2 | 7 | 1 | 8 | 3 | 6 | 9 | 5 | 4 |
| 4 | 9 | 8 | 2 | 5 | 1 | 7 | 3 | 6 |
| 6 | 5 | 3 | 7 | 9 | 4 | 8 | 2 | 1 |
| 7 | 1 | 4 | 3 | 2 | 5 | 6 | 8 | 9 |
| 3 | 8 | 5 | 6 | 7 | 9 | 1 | 4 | 2 |
| 9 | 2 | 6 | 1 | 4 | 8 | 5 | 7 | 3 |

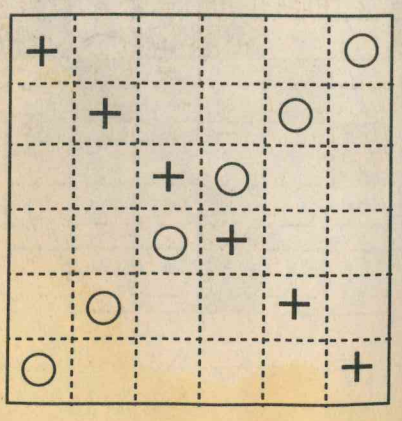
**6.**

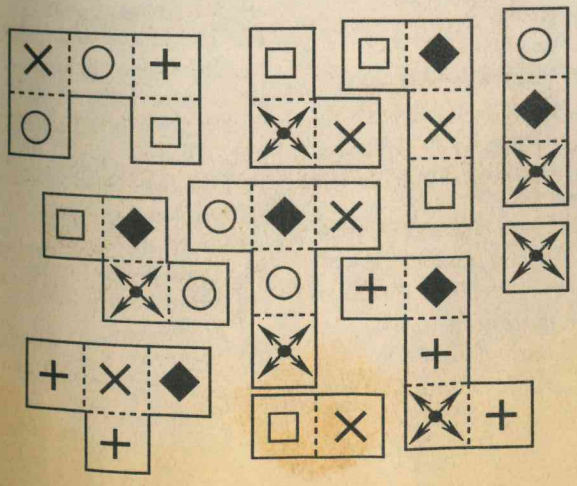
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 6 | | | 7 | | | | 5 | 3 |
| 3 | | 9 | | 6 | | 7 | | |
| | 7 | | 9 | | 3 | 6 | | |
| | | 6 | 4 | | | 2 | | 7 |
| | | 7 | | 2 | 8 | | 6 | |
| 2 | 8 | | | 7 | | | 9 | |
| 7 | | | | | 9 | | 3 | 2 |
| | 2 | 1 | | | 4 | | | 9 |
| | 9 | | 2 | 1 | | 5 | | |

# JIGSAW LOGIC

**All you have to do to solve this puzzle is fit the ten pieces below on the right side into the grid so that each line across and each line down contains the six different symbols pictured above the grid. The symbols already in the grid are there to help you figure out how the pieces fit together and should not be moved or changed in any way. Likewise, each of the ten pieces must be kept as a unit as it is pictured. The pieces can be turned in any direction to fit into the grid. When you've finished, no symbol will be repeated within a line either across or down.**

**Solution is on page 60.**





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098-CLPMLL

# LOGIC PROBLEM

## 7. THE AUCTION

by Julie Spence

One day last summer, Vicky and four of her friends went to a country auction. Each woman brought with her exactly $35. Each of the five, including Ms. Day, bought just one item, and each spent a different whole number of dollars (none spent more than she brought with her). From the clues below, can you determine the full name of each woman, the amount each spent and the item each purchased?

1. Ms. Marx took home twice as much money as Suzanne, who took home twice as much as the one who bought the chair.
2. Ms. Valley spent twice as much as Cindy took home.
3. Ms. Clark, who bought the lamp, had $10 left, twice as much as one of the other women.
4. The one who bought the picture took home three times as much as Marie.
5. Brenda bought the vase, which cost less than the box, which was half the price of one of the other items.
6. Ms. Walsh spent twice as much as one of the others.

**Solution is on page 61.**

**In solving this Problem, we found the chart below to be most helpful. If you enter the information as you discover it, you will be able to eliminate possibilities presented by the clues.**

| first name | last name | amount spent | item bought |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

# SQUARE LOGIC

by Linda Thistle

**Each letter in the diagram below stands for a number from 1 through 36. Using the nine clues, can you deduce the number represented by each letter? As you will see from clue 2, when all the numbers have been correctly entered into the diagram, it will be a Magic Number Square. As each number from 1 through 36 is used only once (clue 1), you will find it helpful to cross out each number as you place it in the diagram (remember to cross out "1," which has already been entered).**

**Solution is on page 60.**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 |

## CLUES

1. Only the whole numbers from 1 to 36 are used. Each number is used only once, and all thirty-six numbers are used.
2. The six numbers in each row across, each column down, and each of the two diagonals add up to 111.
3. The squares JJ, G, M, X, Y, and F contain consecutive numbers in ascending order.
4. E is one-half of J; J is one-half of T.
5. L is one-half of Q; Q is one-half of I.
6. R is one-fifth of U; U is one-half of II.
7. W is one-half of D and one-third of N.
8. DD is one-half of S; S is one-fourth of O.
9. EE is one-sixth of A; A is one-sixth of F.

Least Exp. Tour Bus to the Arizona (infamous Pearl Harbor attack in '41) Cost: $18.00! Needs by the 17th of Sept.

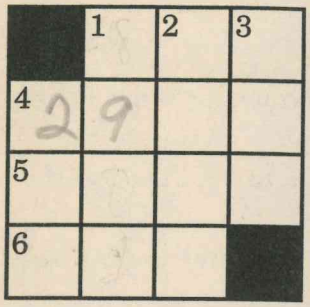
United Airlines Flight #53 to Hawaii 8:30 a.m. flight 11:05 Hawaii time Indianapolis Colts? No, oops!

| | | | | | |
|---|---|---|---|---|---|
| A 6 | B | C | D 18 | E 7 | F 36 |
| G 32 | H | I 20 | J 14 | K | L 5 |
| M 33 | N 27 | O 16 | P 22 | Q 10 | R 3 |
| S 4 | T 28 | U 15 | V 21 | W 9 | X 34 |
| Y 35 | Z | AA | BB | CC | DD 2 |
| EE 1 | FF | GG | HH | II 30 | JJ 31 |

#10 minimum per meal (no, Kristin, not $1,000,000!) If you lose Eye-Dee - no plane ride!

# GO FIGURE!

**In Go Figure!, use the ACROSS and DOWN clues to determine which of the digits 1 through 9 belongs in each square in the diagram. Digits may be repeated within a number, and no zeros are used.** **Solution is on page 65.**



### ACROSS

1. The same number is repeated three times.
4. Reading from left to right, the first two digits form a number that is evenly divisible only by itself and the digit 1; this is also true of the last two digits. In addition, the first digit is 7 less than the second digit.
5. This is four consecutive digits in either ascending or descending order.
6. The second digit is half of the first digit, and the third digit is one more than the first.

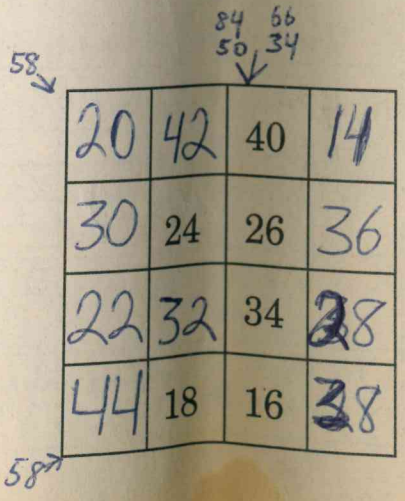
### DOWN

1. The last two digits form a number that is the product of the first two digits.
2. The first two digits form a number that is the product of the last two digits.
3. This is three consecutive digits in either ascending or descending order.
4. The second and the third digits are both evenly divisible by the first digit.

---

# MAGIC NUMBER SQUARE

**For the puzzle below, try to place the numbers allowed by the rule under the diagram into the blank squares so that the numbers in the following groups add up to 116: 1. each row; 2. each column; 3. both diagonals; 4. the four center squares; 5. the four corner squares; 6. each quarter of the diagram. A number will be used only once in the diagram.** **Solution is on page 65.**



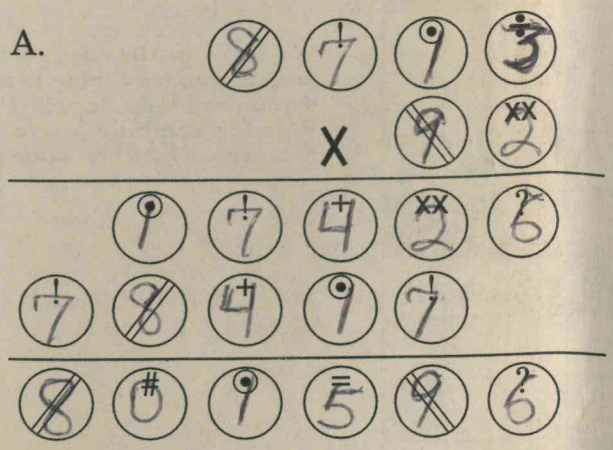

Use every even number from 14 to 44, inclusively.

# TWO-PART MATH

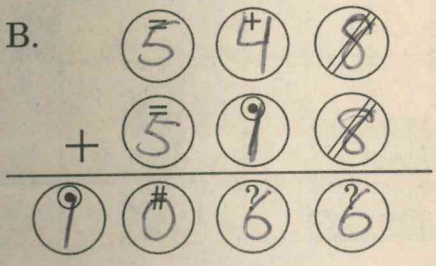
Each of the symbols in the two arithmetic problems below stands for one of the numbers 0 through 9, but no two symbols stand for the same number. Each symbol does stand for the same number through both problems, however, so if you were to place a "3" in the upper right circle in Problem A, you would also place a "3" in any other circle containing ÷. By working back and forth from one problem to the other, can you deduce the number represented by each symbol?

Solution is on page 65.

A.



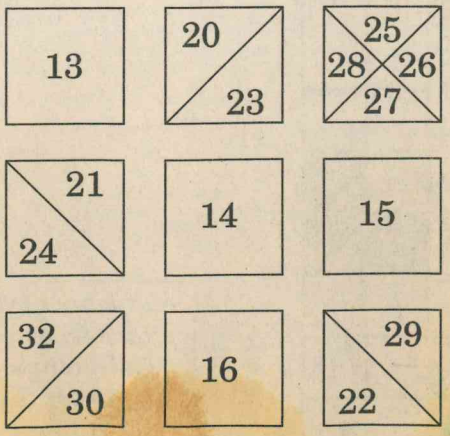
B.

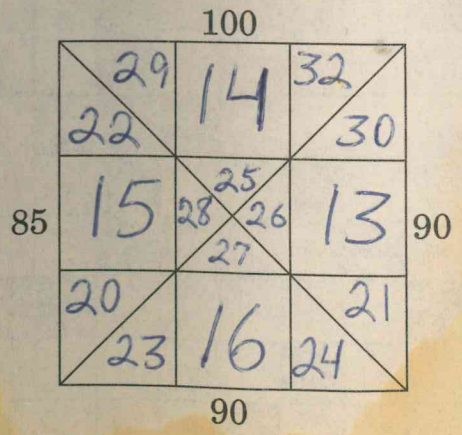


# TRIANGULAR SQUARE

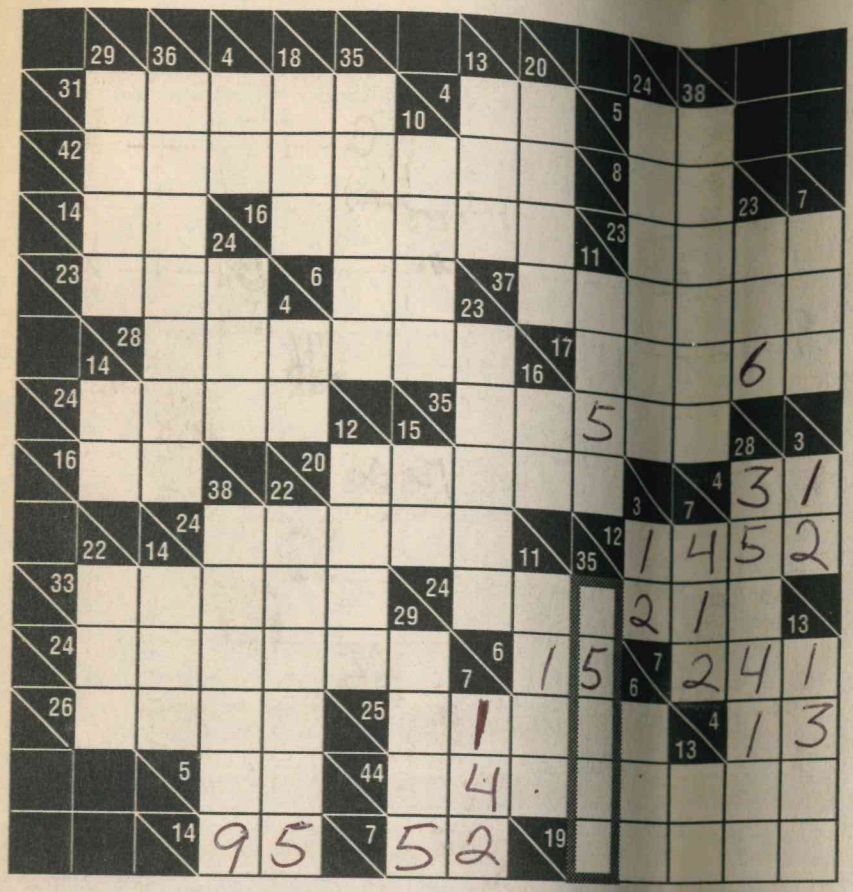
Can you place the nine numbered squares below into the diagram so that the four numbers in each of the diagram's four large triangles, when added together, equal the number given next to that triangle? Each square's pattern must match the pattern of the diagram square in which it is placed, and you may not rotate the squares.

Solution is on page 65.



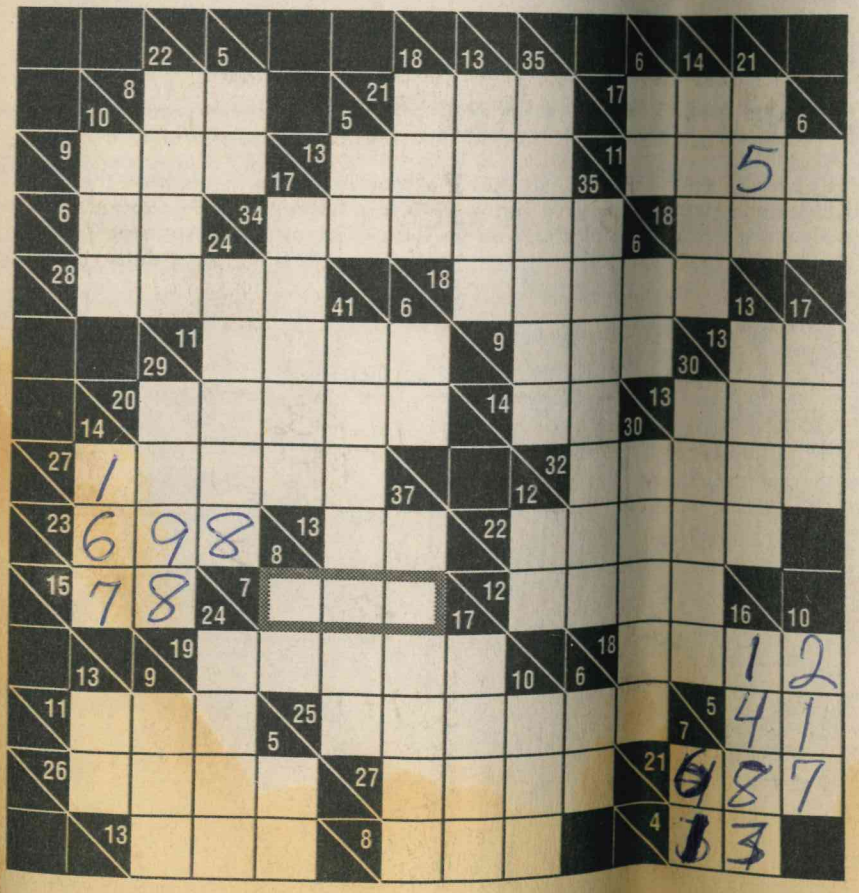
# CROSS SUMS



## NUMBER 13

**We have outlined one area in each diagram on these two pages. If you need help starting a puzzle, the digit combination to go into that area is listed on page 65.**

**Solutions are on page 59.**



## NUMBER 14

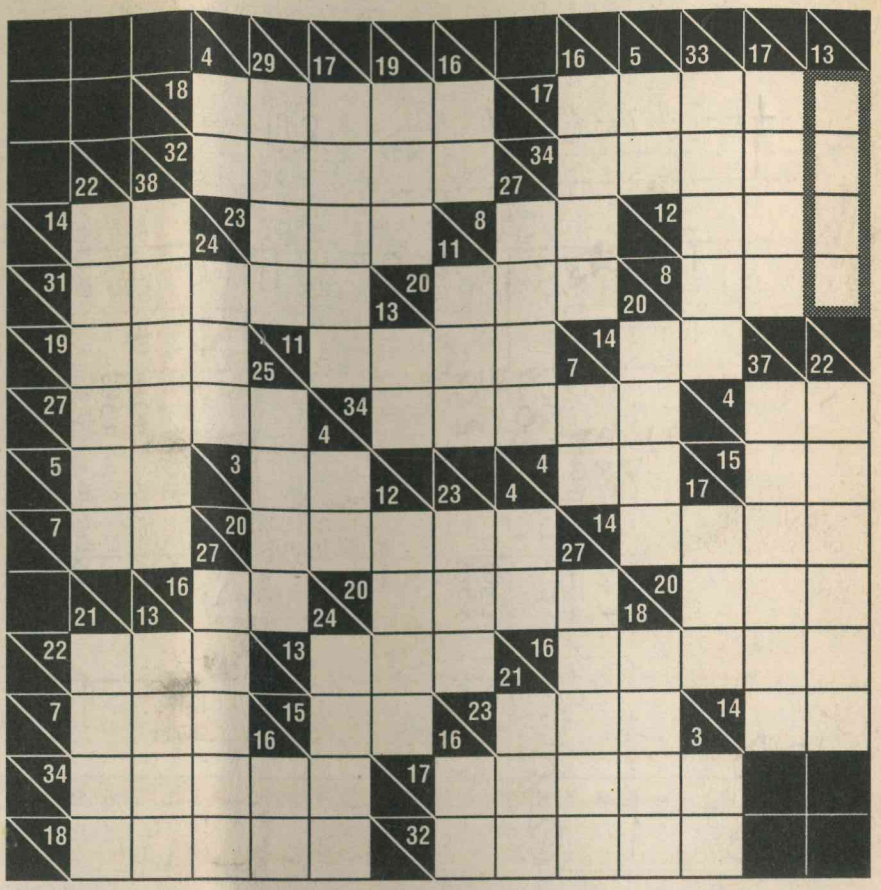
*Add more to your total puzzle enjoyment with* ***Collector's Series Cross Sums.*** *You'll find over 100 of your favorites. To order, see page 15.*

# CROSS SUMS

Regulations & Rules

## NUMBER 15

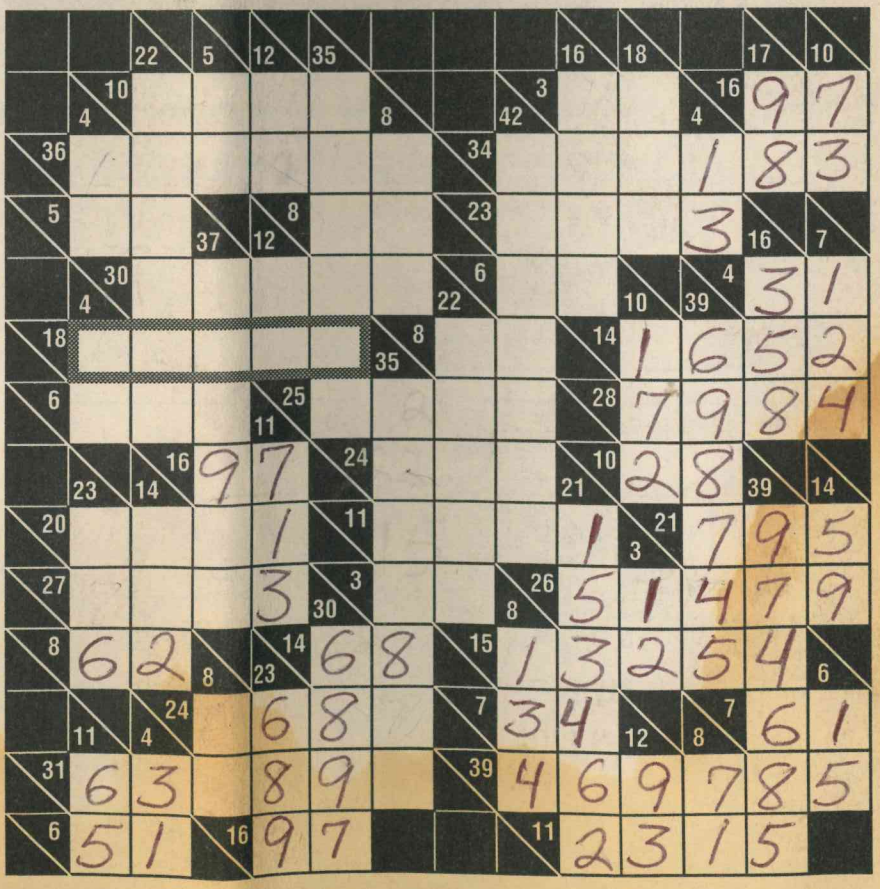
1. Stay wit grp.
2. Each team has its own colors (new pool game now?)
3. Sandy has teal and purple! (Are you single or married?)



Solutions are on page 59.

## NUMBER 16

5



# WORD ARITHMETIC

Solving directions are on page 8. Answers are on page 65.

**28.** DIRECTBLOW

0 1 2 3 4 5 6 7 8 9

```
                5285
                TROT
91230 | 4822345530
WIRED | CORRECTED
      | 456150
      | CTBITD
      | 260845
      | RBDOCT
      | 182460
      | IORCBD
      | 783858
      | LOEOTE
      | 729840
      | LRWOCD
      | 540180
      | TCDIED
      | 456150
      | CTBITD
      |  84930
      | OEWOD
```

**29.** CRUISEBOAT

0 1 2 3 4 5 6 7 8 9

```
                  59
                  SET
9814 | 45137241
TARS | SERIOUS
     | 39256
     | ITUEB
     | 58813
     | EAARU
     | 49070
     | STCOC
     | 27424
     | TOSUS
     | 88326
     | AAIUB
     |  9098
     |  TCTA
```

**30.** CAGEDLIONS

0 1 2 3 4 5 6 7 8 9

```
                 438
                 DEN
8683 | 38057933
NINE | ENCLOSE
     | 34732
     | EDOEG
     | 33259
     | EEGLS
     | 26049
     | GICDS
     | 72103
     | OGACE
     | 89464
     | ISDID
     |  2639
     |  GIES
```

**31.** FI

0 1 2 3 4 5 6 7 8 9

```
          1
          ILL
ARC | SCALE
    | ARC
    | MPSL
    | 1
    | MIML
    | 0
    | MAFE
    | 1
    | MIML
    |  PCM
```

**32.** ANOLDTRICK

0 1 2 3 4 5 6 7 8 9

```
          733
          ILL
975 | 7147855
KIT | INDICT
    | 6825
    | RCOT
    | 3228
    | LOOC
    | 2925
    | OKOT
    | 3035
    | LALT
    | 2925
    | OKOT
    |  110
    |  NNA
```

**33.** KINGCOBRAS

0 1 2 3 4 5 6 7 8 9

```
          52
          ON
1782 | 92840
IRAN | SNACK
     | 8910
     | ASIK
     | 3740
     | GRCK
     | 3564
     | GOBC
     |  176
     |  IRB
```

**34.**

0 1 2 3 4 5 6 7 8 9

```
          MY
TOPS | MASTER
     | ROEYT
     | YDDOR
     | MPYAO
     |  TRPD
```

**35.** S

0 1 2 3 4 5 6 7 8 9

```
          HA
          0
TALL | LASTED
     | 1  0
     | LTIIS
     | KDKED
     | KAHER
     |     0
     |  ASK
```

**36.** PAINTBRUSH

0 1 2 3 4 5 6 7 8 9

```
          474
          TUT
189 | 89675
ASH | SHRUB
    | 756
    | UBR
    | 1407
    | ATPU
    | 1323
    | ANIN
    |  845
    |  STB
    |  756
    |  UBR
    |   89
    |   SH
```

# LOGIC PROBLEM

## 8. THE AMBASSADORS

**by Lois Bohnsack**

Misters Carter, Kreech, Morley, Stamey, and Vance were recently appointed as ambassadors to five European nations. Each appointee, as it happens, is fluent in the language of precisely one of these countries, but none has been appointed to the country where he speaks the native language, so each is presently taking an intensive course in the language of the country in which he will serve. From the clues below, can you determine each man's full name, the language he spoke fluently before his appointment, and the country in which he will serve?

1. Three of the men are Peter, Erwin, and Mr. Kreech; none of the three was appointed to serve in Spain.
2. Neither Howard nor the ambassador to Italy can speak Russian or German.
3. Neither the man who speaks Italian nor Mr. Vance will be living in France.
4. Mr. Stamey is originally from New York. Mr. Kreech and the man who speaks Spanish are both from California. Randy and the ambassador to Italy are both from Illinois. (Note: All five men are mentioned here.)
5. The five ambassadors are Howard, Mr. Carter, Alan, the ambassador to Russia, and the man who speaks Italian.
6. Peter does not speak German.

**Solution is on page 61.**
**See page 5 for directions on how to use the solving chart.**

How about No-Finger Poi?

Ele - Black
Akala - Pink
Ke'Oke'O - White
Ono'Ono'O - Green
Palaunui / Brown

| | | Carter | Kreech | Morley | Stamey | Vance | language spoken: French | German | Italian | Russian | Spanish | country: France | Germany | Italy | Russia | Spain |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Alan | | | | | | | | | | | | | | | |
| | Erwin | | | | | | | | | | | | | | | |
| | Howard | | | | | | | | | | | | | | | |
| | Peter | | | | | | | | | | | | | | | |
| | Randy | | | | | | | | | | | | | | | |
| country | France | | | | | | | | | | | | | | | |
| | Germany | | | | | | | | | | | | | | | |
| | Italy | | | | | | | | | | | | | | | |
| | Russia | | | | | | | | | | | | | | | |
| | Spain | | | | | | | | | | | | | | | |
| language spoken | French | | | | | | | | | | | | | | | |
| | German | | | | | | | | | | | | | | | |
| | Italian | | | | | | | | | | | | | | | |
| | Russian | | | | | | | | | | | | | | | |
| | Spanish | | | | | | | | | | | | | | | |

# FIGURE LOGIC 8

by Linda Thistle

**This puzzle is a cube — so instead of entering numbers in two directions, you will enter numbers in three. Direction A goes down and to the left, Direction B goes down and to the right, and Direction C goes across. If you need help starting this puzzle, a help is on page 65.**

### DIRECTION A

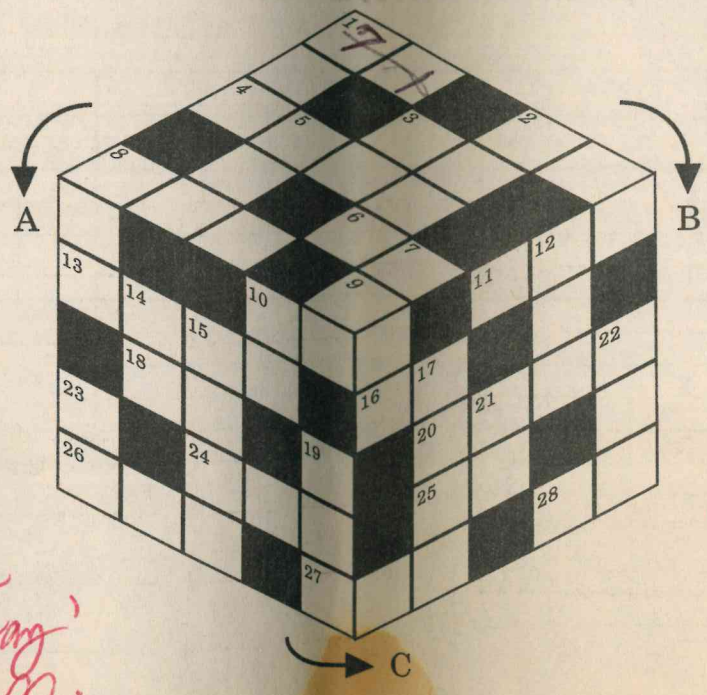
1. One more than 7-A
2. 15-A minus 20-C
3. Seven less than 16-C
5. 24-C minus 1-B
7. 14-A times 1-B
8. 2-B plus 9-B
10. Two less than 28-C
14. One-fourth of 10-A
15. 19-A times 18-C
19. 8-A minus 27-C
23. 18-C minus 1-B

### DIRECTION B

1. One-seventh of 3-B
2. Three times 25-C
3. Five times 14-A
4. 1-A times 14-A
6. One less than 18-C
8. 22-B minus 7-A
9. 14-A times 23-A
12. One-third of 5-A
17. 14-A times 12-B
21. Four less than 23-A
22. 26-C plus 27-C

### DIRECTION C

10. Six times 16-C
11. One-half of 22-B
13. 3-A times 21-B
16. Two times 18-C
18. One-third of 19-A
20. 10-A times 28-C
24. 9-B plus 10-C
25. 19-A minus 21-B
26. One-half of 10-C
27. Eight times 3-A
28. Forty less than 25-C




Eliza Parke
'Sunshine Day'
No More El Nino
R & D Records

Not me
Eliza?

Solution is on page 60

# LOGIC PROBLEM

by Dodi Schultz

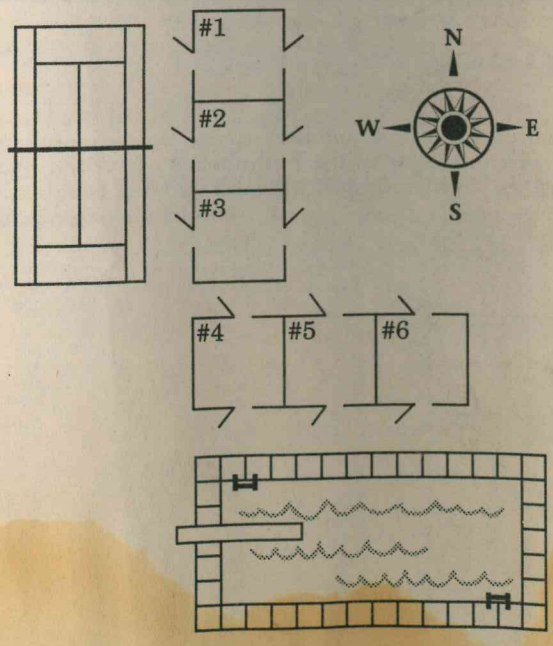
## 9. THE CONDO COMPLEX

The Quades and five other married couples occupy the six apartments at the one-story condominium called the Clover Arms. The complex includes a swimming pool and a tennis court and, as shown in the diagram, each apartment has two entrances — one from a path leading from the street, the other giving directly upon either the tennis court or the pool. From the clues below, can you determine the full names of each couple (one husband's first name is George) and the apartment they live in? Note: Husbands and wives use the same last names.

1. Ira's apartment is on the tennis-court side.
2. Agatha's apartment immediately adjoins those of the Parkers and the Riders.
3. Bruce and his wife, who are not the Newells, live north of at least one other couple.
4. Edward and Frances live in different wings.
5. Laura, whose apartment is not on the pool side, lives south of the Newells.
6. Mrs. Minton and her husband, who is not Jeffrey, are closer to the tennis court than Harriet, who is not Mrs. O'Brian.
7. Carol lives to the east of at least one other couple.
8. Kate, who is not Mrs. Rider, has farther to walk to the pool than Bruce.
9. The Riders live north of at least one other couple.
10. Donald, whose wife is not Frances, lives west of the O'Brians.
11. Edward's apartment is closer to the pool than at least one other apartment.
12. At least one couple lives south of the Parkers.

**Solution is on page 62.**

**In solving this Problem, we found the chart below to be most helpful. If you enter the information as you discover it, you will be able to eliminate possibilities presented by the clues.**




tennis-court side

#1 _____ & _____ _____

#2 _____ & _____ _____

#3 _____ & _____ _____

swimming-pool side

#4 _____ & _____ _____

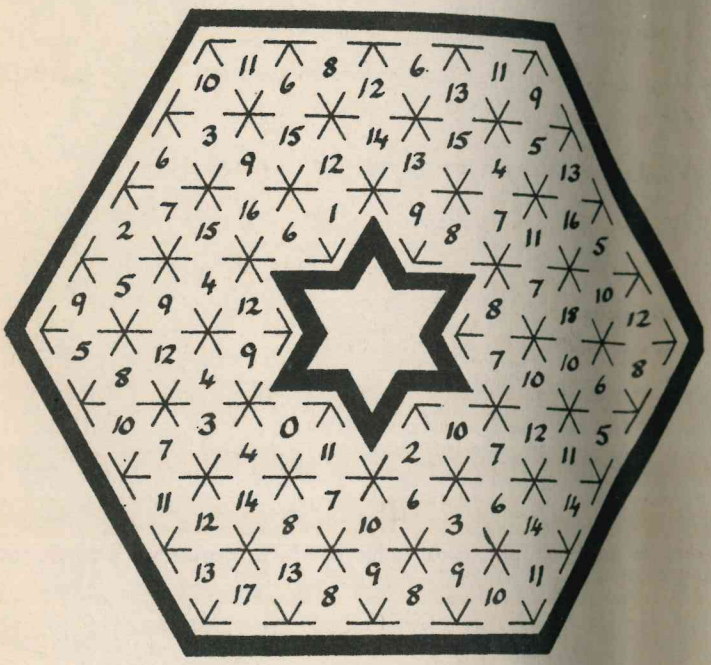
#5 _____ & _____ _____

#6 _____ & _____ _____

# TRIGONS 1

**Trigons is a brain teaser that will test your powers of logic and deduction. The diagram is made up of a series of open triangles with a number in the center; that number represents the sum of the digits you are to write into the spaces on the sides of the triangles. Where two triangles share a side, they share the number to be written into that side. When a triangle shares only one side with another triangle, the two noncontact sides of that triangle will share the same number. All the combinations use only the digits 0 through 6. We've listed all the possible combinations for every sum in the small chart, so all you have to do is figure out where each of those combinations belongs (not as easy as it sounds!). The numbers in a combination can go in any order around their triangle, and each combination will be used exactly once. You can begin by filling in 0-0-0 around the triangle with 0 at its center and 6-6-6 around the triangle with 18 at its center. It helps to look for large sums adjacent to small sums, as they will have fewer possibilities for common digits.**

**Solution is on page 62.**



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0 | 000 | | | | | | |
| 1 | 001 | | | | | | |
| 2 | 002 | 011 | | | | | |
| 3 | 003 | 012 | 111 | | | | |
| 4 | 004 | 013 | 022 | 112 | | | |
| 5 | 005 | 014 | 023 | 113 | 122 | | |
| 6 | 006 | 015 | 024 | 033 | 114 | 123 | 222 |
| 7 | 016 | 025 | 034 | 115 | 124 | 133 | 223 |
| 8 | 026 | 035 | 044 | 116 | 125 | 134 | 224 | 233 |
| 9 | 036 | 045 | 126 | 135 | 144 | 225 | 234 | 333 |
| 10 | 046 | 055 | 136 | 145 | 226 | 235 | 244 | 334 |
| 11 | 056 | 146 | 155 | 236 | 245 | 335 | 344 | |
| 12 | 066 | 156 | 246 | 255 | 336 | 345 | 444 | |
| 13 | 166 | 256 | 346 | 355 | 445 | | | |
| 14 | 266 | 356 | 446 | 455 | | | | |
| 15 | 366 | 456 | 555 | | | | | |
| 16 | 466 | 556 | | | | | | |
| 17 | 566 | | | | | | | |
| 18 | 666 | | | | | | | |

# SECRET SQUARES

**The sum of the numbers in each row, column, and long diagonal of the magic number square below equals 52. However, each of its digits 0 through 9 has been replaced by a different letter of the alphabet. It's your job, then, to determine the numbers that should be written in the 16 squares. As a starting hint, we'll tell you that H equals 3.**

**Solution is on page 65.**

| | | | |
|---|---|---|---|
| VN 18 | B 5 | EE 22 | R 7 |
| VL 14 | VB 15 | H 3 | EJ 20 |
| V 1 | EH 23 | VV 11 | VR 17 |
| VG 19 | G 9 | VT 16 | N 8 |

# LOGIC PROBLEM

## 10. PLAYING THE STOCK MARKET

by Randall L. Whipkey

One recent morning, Lucky Louie decided to try the stock market as a means of increasing his fortune. He bought shares in five corporations, scientifically choosing his stocks by throwing darts at a newspaper listing. As Lucky Louie would have it, all five stocks rose in price by the end of that day. From the following clues, can you deduce how much each stock increased in value and its closing price at the end of the day? (No two increases or closing prices were the same; all increases and closing prices are in whole numbers.)

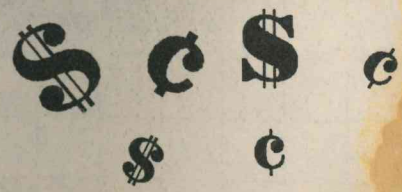
1. Polk Motors stock increased 2 points more than Zeroz Corporation stock, while its closing price was 10 points lower than the Zeroz stock and one-half that of the highest-priced stock.
2. Nadir Markets increased twice as much as Siding Aluminum to a closing price four times that of Siding stock.
3. The stock with the third-highest closing price went up twice as many points as Black Gold Petroleum stock, which closed 5 points higher than the lowest-priced stock; the smallest increase was 2 points.
4. The lowest-priced stock closed 25 points under the third-highest-priced one.
5. The highest-priced stock increased 1 point less than the Black Gold Petroleum stock.

**Solution is on page 62.**
**See page 5 for directions on how to use the solving chart.**

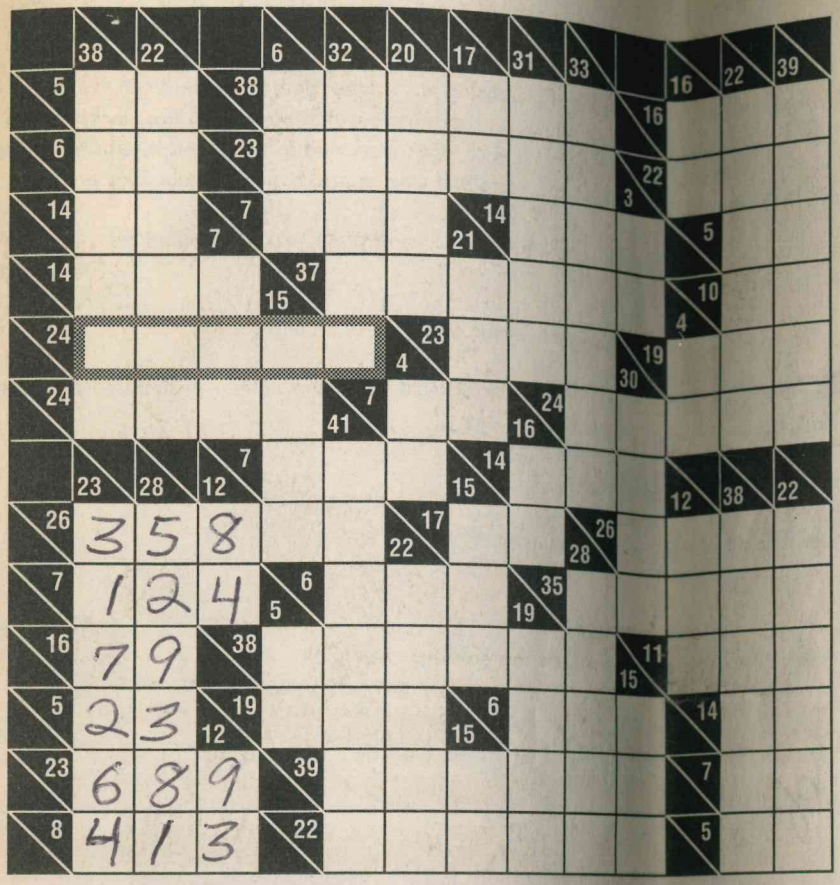
What is Zeroz Corporation?

| | increases | | | | | closing prices | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
| Black Gold | | | | | | | | | | |
| Nadir Markets | | | | | | | | | | |
| Polk Motors | | | | | | | | | | |
| Siding Aluminum | | | | | | | | | | |
| Zeroz Corporation | | | | | | | | | | |

| closing prices | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |



# CROSS SUMS

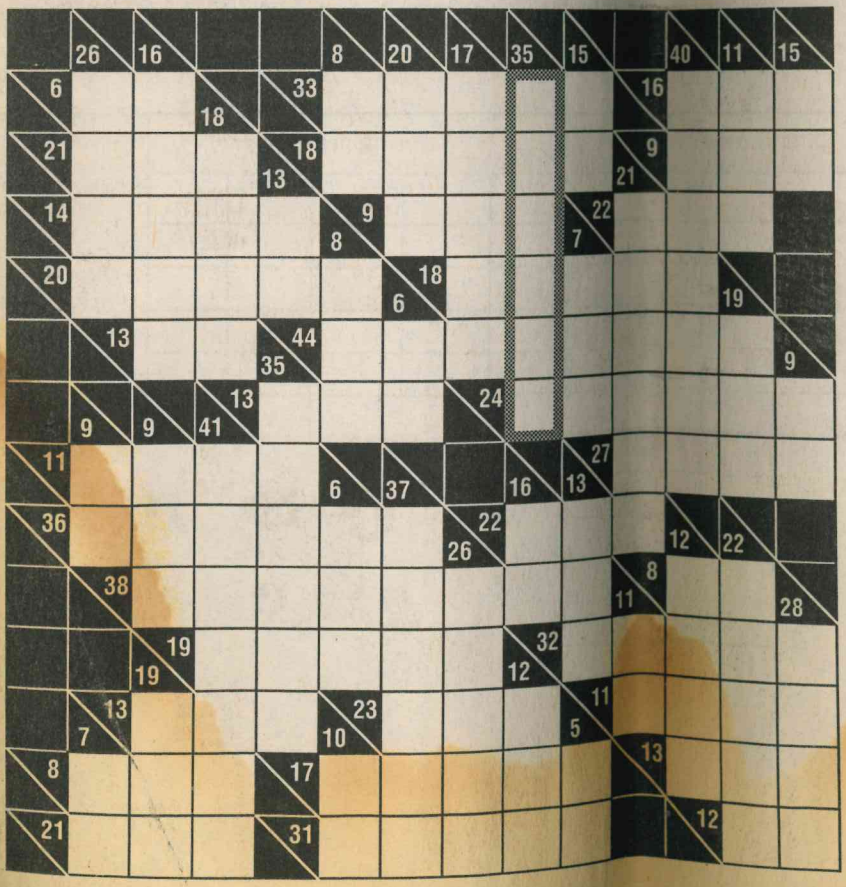



## NUMBER 17

**We have outlined one area in each diagram on these two pages. If you need help starting a puzzle, the digit combination to go into that area is listed on page 65.**

Kathy Garrity
"Leavin' On a Jet Plane"
I Hate Going Home!
R & G Records

**Solutions are on page 59.**

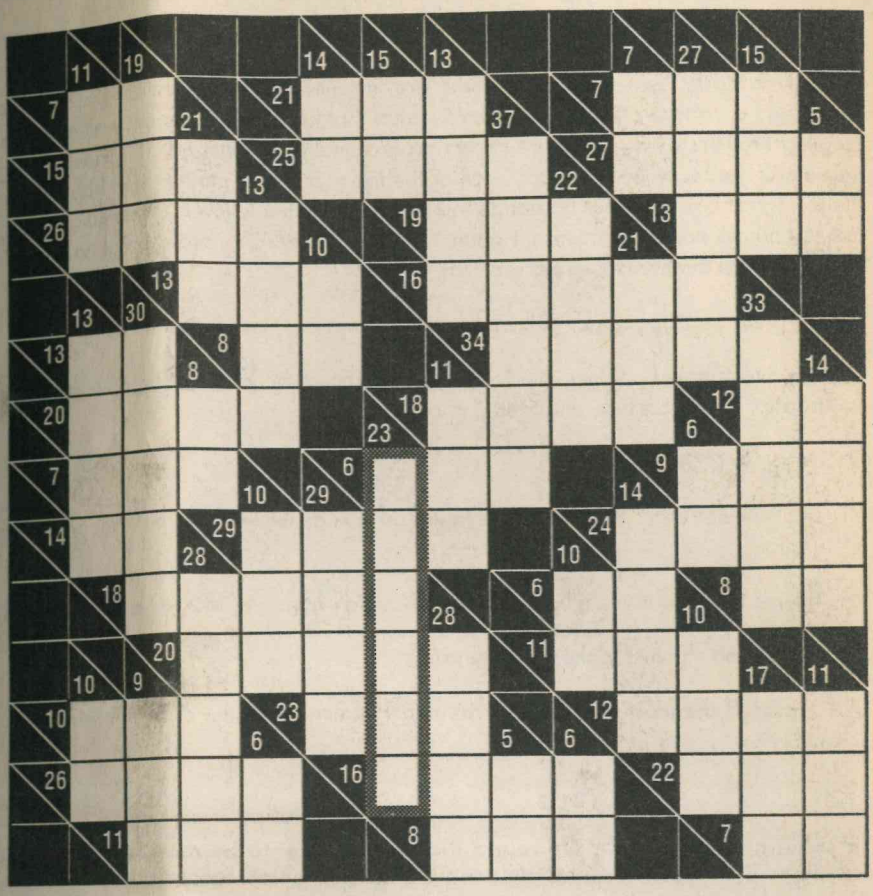



## NUMBER 18

*Add more to your total puzzle enjoyment with* ***Collector's Series Cross Sums.*** *You'll find over 100 of your favorites. To order, see page 15.*

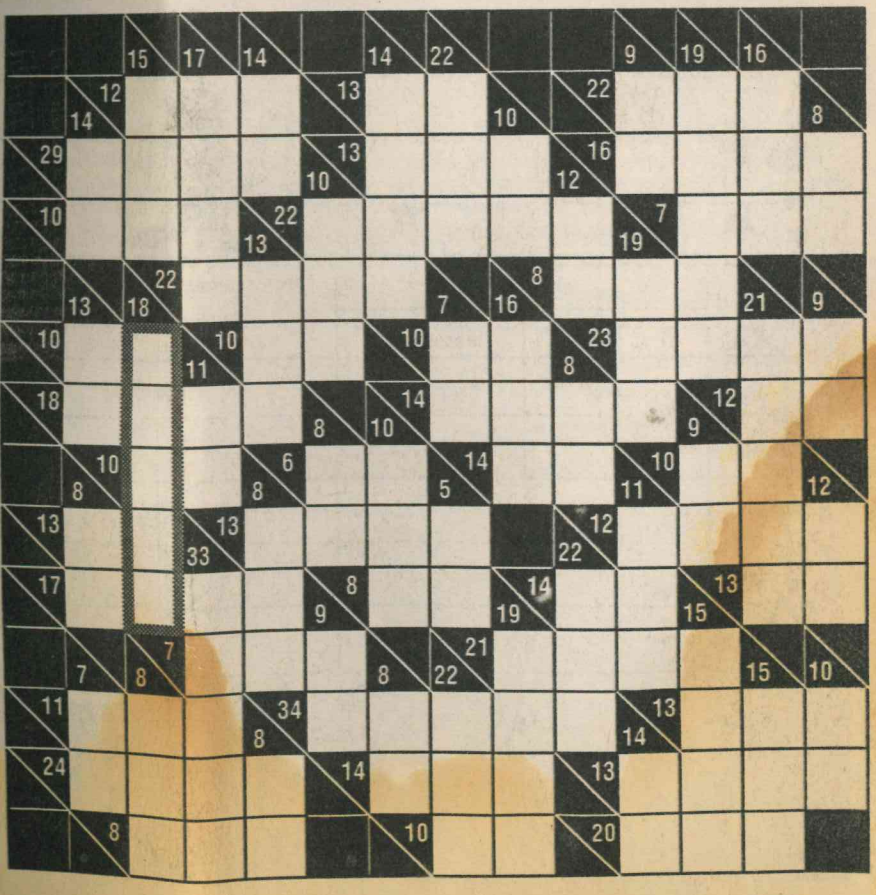
# CROSS SUMS

## NUMBER 19



Solutions are on page 59.

## NUMBER 20



# LOGIC PROBLEM

## 11. CIRCUS TIME

**by Kathleen A. Misze**

Dan, Fred, Harry, John, and Marty, who are (not necessarily respectively) a bareback rider, a clown, an elephant trainer, a lion tamer, and a trapeze artist, perform the five acts that (in one order or another) form the finale of each afternoon's performance at the Bingling Brothers Circus. They are known professionally as "Dancy Dart," "Flash," "Juda Jewel," "Pompy," and "Skip" — again, not necessarily respectively. In his act, each of the five men has a partner, who happens to be the wife of one of the other four. (Each of the five wives has taken her husband's last name.) From the following information, can you determine each performer's full name (the five last names are Beach, Heron, Hogan, Miller, and Smith), his professional name, his act, and his partner's full name, as well as the order in which the five acts are presented?

1. Christine isn't the partner of the performer known as "Flash."
2. The five married couples are "Skip" and Christine Miller, Marty and Marsha Beach, Harry and Claudia, Mr. Hogan and the trapeze artist's partner, and Fred and Nancy.
3. Harry isn't "Dancy Dart."
4. The women's order of appearance in the show is as follows: Sharon, Mrs. Smith, the partner of "Juda Jewel," John's partner, and Claudia.
5. The men appear in the following order: Claudia's husband, Marty, Mr. Smith, "Flash," and the lion tamer.
6. Nancy isn't married to the elephant trainer.
7. "Flash" is the most experienced circus performer, while the elephant trainer has the least experience, and the clown falls in between.

**Solution is on page 62.**

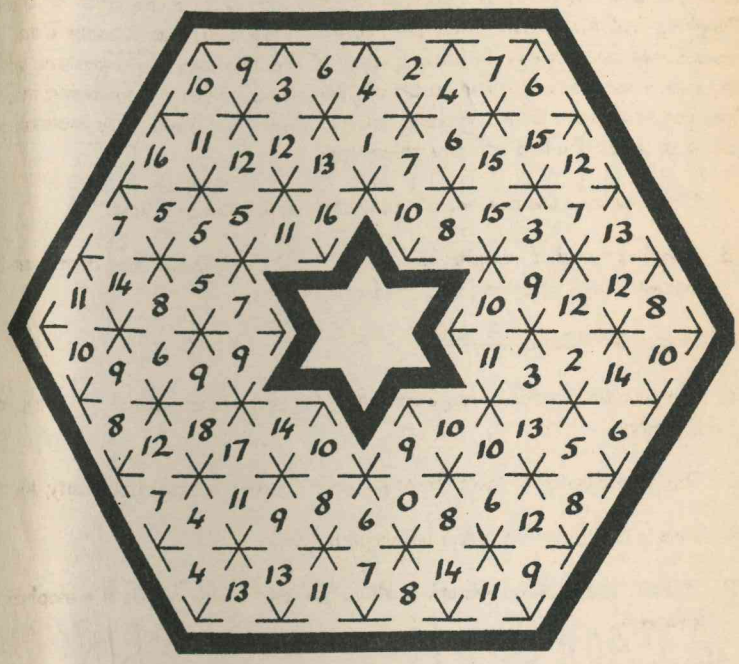
**In solving this Problem, we found the chart below to be most helpful. If you enter the information as you discover it, you will be able to eliminate possibilities presented by the clues.**

| | performer | | professional | | partner | |
|---|---|---|---|---|---|---|
| | first name | last name | name | act | first name | last name |
| 1st | | | | | | |
| 2nd | | | | | | |
| 3rd | | | | | | |
| 4th | | | | | | |
| 5th | | | | | | |

# TRIGONS 2

Directions for solving Trigons are on page 44.
Solution is on page 62.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0 | 000 | | | | | | | |
| 1 | 001 | | | | | | | |
| 2 | 002 | 011 | | | | | | |
| 3 | 003 | 012 | 111 | | | | | |
| 4 | 004 | 013 | 022 | 112 | | | | |
| 5 | 005 | 014 | 023 | 113 | 122 | | | |
| 6 | 006 | 015 | 024 | 033 | 114 | 123 | 222 | |
| 7 | 016 | 025 | 034 | 115 | 124 | 133 | 223 | |
| 8 | 026 | 035 | 044 | 116 | 125 | 134 | 224 | 233 |
| 9 | 036 | 045 | 126 | 135 | 144 | 225 | 234 | 333 |
| 10 | 046 | 055 | 136 | 145 | 226 | 235 | 244 | 334 |
| 11 | 056 | 146 | 155 | 236 | 245 | 335 | 344 | |
| 12 | 066 | 156 | 246 | 255 | 336 | 345 | 444 | |
| 13 | 166 | 256 | 346 | 355 | 445 | | | |
| 14 | 266 | 356 | 446 | 455 | | | | |
| 15 | 366 | 456 | 555 | | | | | |
| 16 | 466 | 556 | | | | | | |
| 17 | 566 | | | | | | | |
| 18 | 666 | | | | | | | |



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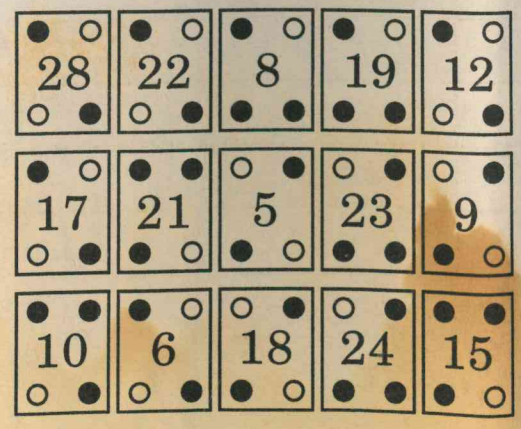
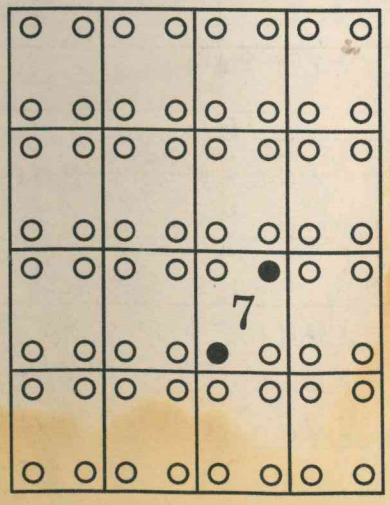
# SUM SPOTS

**The idea of Sum Spots is to form a magic number square, in which the sums of the numbers in each row, column, and diagonal are the same, by placing numbered tiles into the squares of the diagram. In this puzzle, the sum is 61. Use each tile once and only once. HANDICAP: Each tile has a black and white dot in each corner. As a tile is placed next to another tile in the diagram, the dot patterns must match, black dots next to black dots and white dots next to white dots. These patterns must match on every side that touches another tile, but tiles that touch diagonally do not have to match. For example, the 10 tile could go the left of the 8 tile, since the 10 tile has black dots in its upper- and lower-right corners and the 8 tile has black dots in its upper- and lower-left corners. However, the 10 tile could not go to the right of the 8 tile, since their black and white dots would not match. As you place each tile in the diagram, blacken in the appropriate dots in all corners. It is a good idea to cross off each tile as you use it.**

Solution is on page 65.



# WORD ARITHMETIC

Solving directions are on page 8. Answers are on page 65.

**37.** DREWJACKS

0 1 2 3 4 5 6 7 8 9

```
                1332
             DEER
3229   4302132
ERRS   WEIRDER
       3229
       ERRS
       10731
       DICED
        9687
        SAKC
       10443
       DIWWE
        9687
        SAKC
         7562
         CJAR
         6458
         AWJK
         1104
         DDIW
```

**38.** TWOCANDLES

0 1 2 3 4 5 6 7 8 9

```
                462
             ADO
7456   3450885
LAND   CANTEEN
       29824
       OSEOA
       476848
       ADEAE
       447366
       AALCD
       211255
       OWWON
       149112
       WASWO
        62133
        DOWC
```

**39.** UPBEATSONG

0 1 2 3 4 5 6 7 8 9

```
              138
           PEN
705    97456
OUT    GOATS
       705
       OUT
       26955
       BSGT
       21575
       BPPT
        58066
        TNUS
        56405
        TSAU
         1661
         PSS
```

**40.** CAMPUSLIFE

0 1 2 3 4 5 6 7 8 9

```
              168
           ALF
516    867955
SAL    FLIES
       516
       SAL
       35199
       PSAE
       30966
       PCEL
       423535
       UMPS
       41288
       UAMF
        10707
        ACI
```

**41.** BORNDAYS

0 1 2 3 4 5 6 7 8 9

```
              4385
           GIG
978    5123869
SAY    GRINDS
       48890
       NYSB
       34946
       INND
       29344
       RSIN
        51289
        GORS
        46890
        NYSB
         23879
         RIS
```

**42.** CRAFTY

0 1 2 3 4 5 6 7 8 9

```
           AN
FAN    TRAIN
       TAOO
       UFAN
       UCOR
        FYT
```

**43.** C

0 1 2 3 4 5 6 7 8 9

```
           LOG
LAIR   GLANCE
       RMRO
       AOIAC
       AIMNL
       AMAOE
       AMCRR
       ARA
```

**44.** F ET

0 1 2 3 4 5 6 7 8 9

```
           DO
OOPS   LOITER
       LIFPF
       PILER
       SDLSS
       PTOL
```

**45.**

0 1 2 3 4 5 6 7 8 9

```
           IS
HAND   ORISON
       OIMAI
       NOIEN
       NMMNS
       DOOE
```

These are numbers, LINDA!

# LOGIC PROBLEM

## 12. PRACTICE MAKES PERFECT

**by Cheryl McLaughlin**

One night at the teen center, Barb and five of her friends were standing around discussing how they rarely are able to get together as a group anymore. Each is so busy with homework, family obligations, et cetera that getting all six together is quite difficult. The situation is further complicated by the fact that recently, Barb and the other five have been taking lessons in different activities. From the following clues, can you determine each girl's full name (one surname is Smith), her activity, and the number of months she has been taking lessons? (Note: No fractions of months are involved.)

1. Jenny and the Sweet girl practice their dance and piano lessons together, so they see each other quite often.
2. Ginger has taken lessons one month longer than the Jensen girl (who is not Laurie).
3. Cathy Brown has taken lessons six months longer than the dancer and ten months longer than the Baker girl, who golfs.
4. The tennis player has taken lessons for five months — longer than Sue and the skater, but not as long as Ginger, or the swimmer, or the girl who has taken lessons for twenty months.
5. The dancer has taken lessons twice as long as the Johnson girl and three times as long as Sue.

**Solution is on page 62.**
**See page 5 for directions on how to use the solving chart.**

| | Baker | Brown | Jensen | Johnson | Smith | Sweet | months | | | | | | dance | golf | piano | skate | swim | tennis |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Barb | | | | | | | | | | | | | | | | | | |
| Cathy | | | | | | | | | | | | | | | | | | |
| Ginger | | | | | | | | | | | | | | | | | | |
| Jenny | | | | | | | | | | | | | | | | | | |
| Laurie | | | | | | | | | | | | | | | | | | |
| Sue | | | | | | | | | | | | | | | | | | |
| dance | | | | | | | | | | | | | | | | | | |
| golf | | | | | | | | | | | | | | | | | | |
| piano | | | | | | | | | | | | | | | | | | |
| skate | | | | | | | | | | | | | | | | | | |
| swim | | | | | | | | | | | | | | | | | | |
| tennis | | | | | | | | | | | | | | | | | | |
| months | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |

# FIGURE LOGIC 9
## CHALLENGER

by Linda Thistle

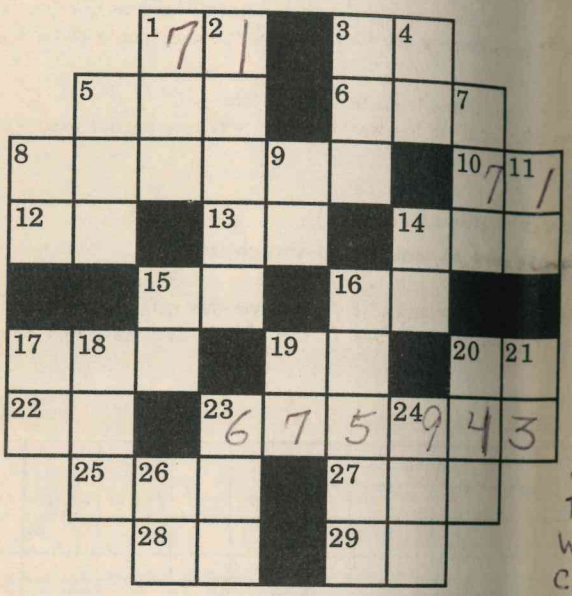
**Each letter used in the clues represents a different digit from 0 to 9; no two answers are the same.**
**If you need help starting this puzzle, a help is on page 65.**

### ACROSS

1. 9-Down plus S
3. 22-Across plus I
5. 18-Down times E
6. 3-Across times T
8. Its digits spell WICKER
10. 1-Across minus W
12. 16-Across plus 4-Down
13. 6-Across minus C
14. Average of 7-Down and 23-Down
15. 14-Down minus T
16. 17-Down times E
17. 1-Down divided by E
19. 17-Down minus W
20. 12-Across plus W
22. 26-Down minus 4-Down
23. Its digits spell BASKET
25. 1-Across times K
27. 19-Down squared
28. 18-Down divided by C
29. 19-Across plus B

### DOWN

1. 6-Across times A
2. 8-Across divided by S
3. 3-Across times 4-Down
4. 19-Down minus A
5. 19-Across times 9-Down
7. 14-Down times I
8. 4-Down plus K
9. 18-Down divided by T
11. 19-Down plus E
14. 28-Across plus R
15. 19-Across times B
16. 27-Across squared
17. 13-Across divided by A
18. 3-Down minus 23-Down
19. 3-Across divided by B
20. 14-Across times B
21. 20-Across minus 22-Across
23. 5-Down minus 3-Down
24. 1-Down plus 7-Down
26. 21-Down plus W



S 5
I 2
E 4
T 3
W 0
C 8
K 9
B 6
A 7
R 1

**Solution is on page 60**

# WHAT'S THE ORDER?

**We asked a solver on the street to try to guess a four-digit number combination; the solver took five guesses, which appear below. In each try, our solver had at least part of the combination correct, as noted by the symbols appearing next to each guess. An "X" next to the combination stands for a correct digit in its correct place in the combination, and an "O" stands for a correct digit out of its correct order. For example, combination B has been given an O and an X, so two of the four digits 6, 5, 3, and 2 appear in the final combination — one in the position given (for example, 3 might be the third of the correct combination), and one in a different position (2 might be the first digit of the combination). The placement of the symbols does not correspond to any particular place in the combination. Using the five graded guesses together, can you deduce the correct combination?** **Solution is on page 66.**

Kristine Wilson
'Sea of Love'
No More Tangles
R & B Records

| | | | | | |
|---|---|---|---|---|---|
| A. | 1 | 9 | 4 | 7 | OX |
| B. | 6 | 5 | 3 | 2 | OX |
| C. | 8 | 2 | 4 | 6 | OX |
| D. | 5 | 7 | 8 | 9 | X |
| E. | 2 | 5 | 1 | 3 | X |

# LOGIC PROBLEM

## 13. THE TOP FIVE HITS

**by Julie Spence**

In all the time that records have been kept for this sort of thing, never has such an amazing feat been accomplished. For five straight weeks, the same five songs have occupied the top five positions on the pop-singles chart. However, no single song occupied the same position for any two weeks. Each week there was a different #1, #2, #3, #4, and #5 song. From the following clues, can you determine how each song ranked each of the five weeks?

1. The first week, "Beverly's Song" ranked after "Evening Has Shattered," but it was not in last place.
2. "Tiptoe Through the Violets" was one place higher the third week than it had been the second week.
3. "Evening Has Shattered" was higher the second week than it was either the first or fourth week.
4. "Age of Sagittarius" was in first place two weeks after it was in second place.
5. "Age of Sagittarius," which never ranked just one below "Tiptoe Through the Violets," fell one position from the fourth to the fifth week.
6. "Burning Chariots," which was lower than "Evening Has Shattered" in the fourth week, was one higher than this song the last week.

**Solution is on page 63.**

**In solving this Problem, we found the chart below to be most helpful. If you enter the information as you discover it, you will be able to eliminate possibilities presented by the clues. Note: In the chart, the rankings read across, the weeks read down.**

| | "Age of Sagittarius" | | | | | "Beverly's Song" | | | | | "Burning Chariots" | | | | | "Evening Has Shattered" | | | | | "Tiptoe Through the Violets" | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| week | 1st | 2nd | 3rd | 4th | 5th | 1st | 2nd | 3rd | 4th | 5th | 1st | 2nd | 3rd | 4th | 5th | 1st | 2nd | 3rd | 4th | 5th | 1st | 2nd | 3rd | 4th | 5th |
| 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | |

# CROSSMATH

**This looks like a crossword puzzle, but it involves numbers, not words. The numbers given in the clues columns are the answers to simple arithmetic problems; the numbers you enter into the diagram will form the problems which result in those answers. All the arithmetic symbols (+, −, x, ÷) have already been entered in their appropriate squares in the diagram. Use the symbols, the crossing numbers, and a bit of logic to determine the digit to enter in each blank square (one digit per square). An important thing to remember: The arithmetic is to be done in the order in which it reads, from left to right or top to bottom — for example, 1 + 2 x 3 equals 9 (1 + 2 = 3; 3 x 3 = 9). If done in any other order, your solution won't work. Arithmetic signs at the beginning or end of a problem (as in 14-Across) should be ignored. You will never use zero as the first digit of a number, though there may be zeroes used as later digits. There are no negative numbers used here, nor are there any fractions used. If you need help getting started, you'll find the correct entry for 1-Across on page 66.**

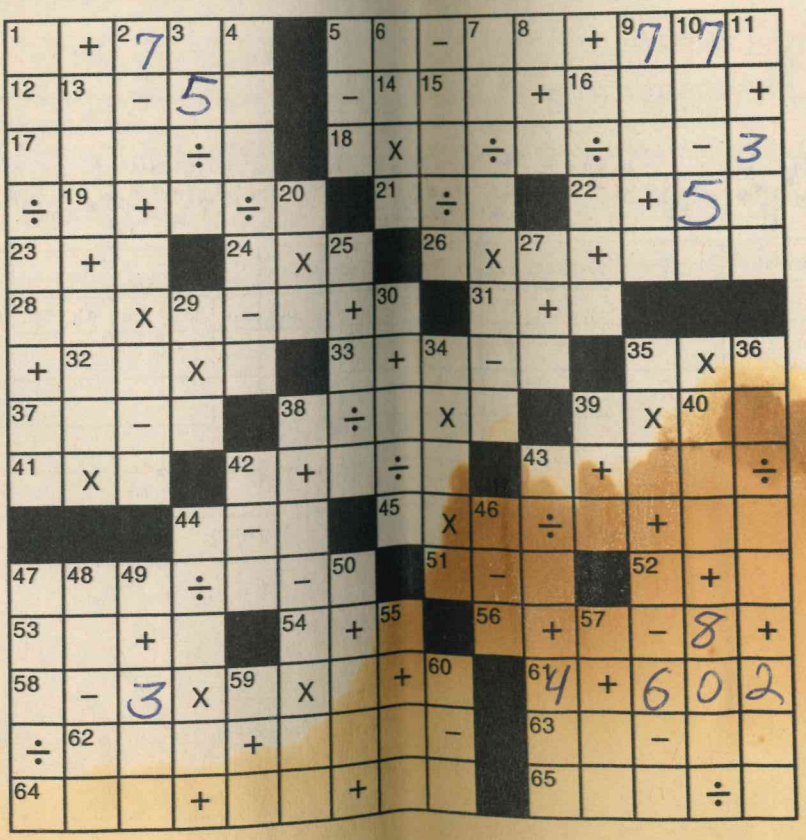
**Solution is on page 64.**

**ACROSS**

1. 724
5. 806
12. 26
14. 580
17. 134
18. 5
19. 4
21. 3
22. 56
23. 8
24. 18
26. 248
28. 38
31. 12
32. 144
33. 8
35. 36
37. 42
38. 18
39. 60
41. 24
42. 6
43. 43
44. 0
45. 17
47. 168
51. 5
52. 12
53. 64
54. 13
56. 6
58. 50
61. 606
62. 413
63. 63
64. 683
65. 77

**DOWN**

1. 59
2. 32
3. 5
4. 50
5. 1
6. 108
7. 94
8. 4
9. 754
10. 20
11. 336
13. 1147
15. 6
16. 8
20. 12
25. 4
27. 13
29. 8
30. 3
34. 36
35. 17
36. 208
38. 24
39. 5
40. 903
42. 0
43. 486
44. 6
46. 6
47. 73
48. 11
49. 314
50. 36
55. 75
57. 37
59. 14
60. 5



# LOGIC PROBLEM

by Julie Spence

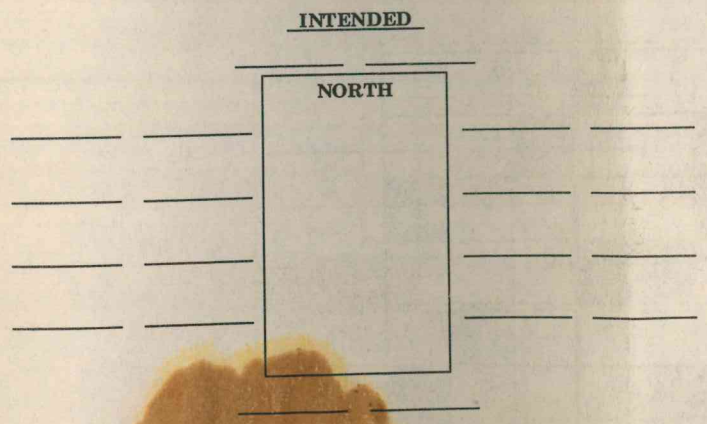
## 14. MISPLACED PLACE CARDS

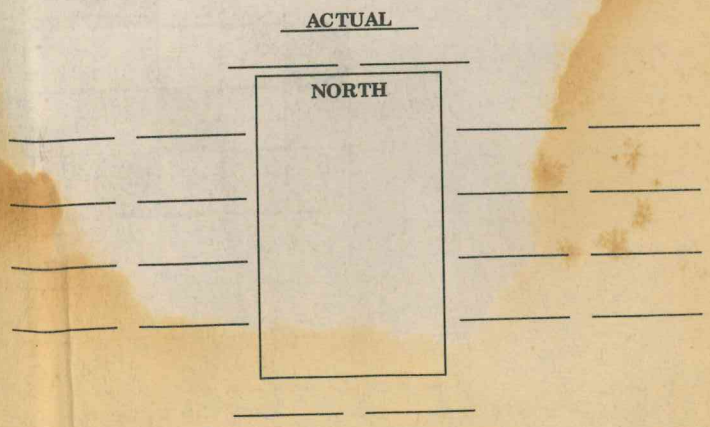
Last week, Paula Truman and her husband gave a dinner party for four other married couples. Preparations for the party were taken care of by both Mr. and Mrs. Truman. One of the things Paula was in charge of was the setting of the table and the seating arrangement. Just before the guests were due to arrive, Paula realized she wouldn't have time to finish everything and asked her husband to help. "Here are the place cards, dear," she said. "Start with mine at the north end of the table, put the next card at the setting to my left, and proceed around the table. You and I will be at the ends." Paula then left the dining room to finish her other tasks. Later, when everyone was sitting down to dinner, Paula noticed that not one person, not even her husband, was sitting where she had intended. After dinner, Mr. Truman confessed to his wife that he had dropped the place cards and, since he was not sure of the order, he had put them around as best as he could. "I remembered you wanted to alternate men and women. I did that," he said. "Oh, more than that," Paula said, "you remembered to put us at the ends of the table, and you put all the guests in places where they had a great time!" From the information below, can you determine Mr. Truman's first name, the full names of the eight guests, the seating Paula had intended, and the seating Mr. Truman arranged? Note: 1. The Trumans have a rectangular table seating one person at each end and four on each side. 2. You may assume each wife has adopted her husband's surname. 3. "Next to" can refer to a person at the end and the person to his/her right or left.

1. Paula had intended to put husbands on opposite sides of the table from their wives.
2. These four ended up on the west side of the table, in no particular order: the Millers, Mr. Brown, and Brenda.
3. Amy ended up between Jim and another man; neither was her husband, and neither was the host.
4. Paula had intended to place Ken and Mr. Rockford directly across from each other, and that is how they ended up.
5. Mr. Washburn ended up next to his wife.
6. Paula had not intended for John to sit next to Joan, and he did not end up next to Joan.
7. Paula had intended for these four to sit on the same side of the table: Mark, Mr. Brown, Nora, and Mrs. Miller.
8. The person Paula had intended for John's immediate left did not end up to his immediate left or right.
9. Paula had not intended for Bob to be across from her or to her immediate left or right.

**Solution is on page 63.**

**In solving this Problem, we found the pictures of the Trumans' table to be most helpful.**



# FIGURE LOGIC 10

by Linda Thistle

## CHALLENGER

**The asterisk in the first box of 16-Across represents a single digit.**
**If you need help starting this puzzle, a help is on page 65.**

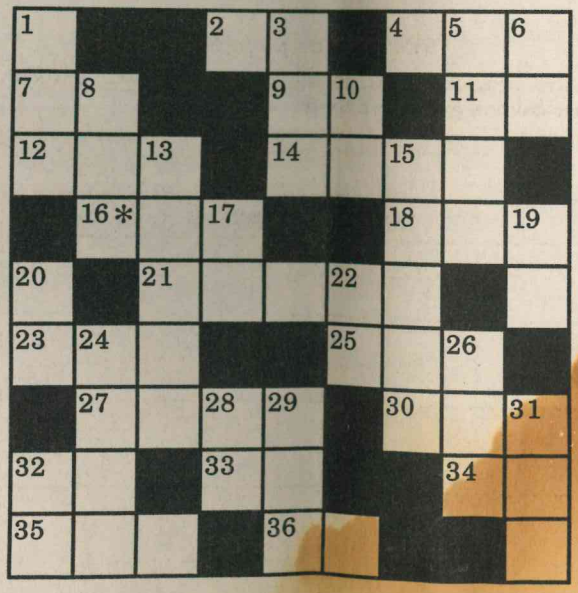
### ACROSS

2. 35-Across minus 16-Across
4. 7-Across plus 12-Across
7. 28-Down plus *
9. Sum of its digits is *
11. 36-Across times *
12. 34-Across times *
14. 9-Across times 3-Down
16. 25-Across minus 11-Across
18. Fifty more than 8-Down
21. 5-Down times *
23. 2-Across plus 35-Across
25. 35-Across plus 17-Down
27. 12-Across times *
30. 33-Across times *
32. Eighty less than 7-Across
33. Square of *
34. 19-Down minus *
35. 9-Across times 36-Across
36. 34-Across minus 33-Across

### DOWN

1. 2-Across times 36-Across
3. 32-Across plus 8-Down
5. 24-Down minus 30-Across
6. 11-Across minus 19-Down
8. 2-Across times *
10. Thirty less than 9-Across
13. 8-Down times 19-Down
15. 14-Across plus 27-Across
17. 32-Across times *
19. Ten times *
20. Forty less than 17-Down
22. 32-Across plus 17-Down
24. 33-Across times 22-Down
26. 4-Across plus 36-Across
28. 2-Across plus 34-Across
29. 16-Across plus 28-Down
31. 30-Across minus *
32. Twenty less than 20-Down

Kristine Wilson
Take Me Out to
the Ballgame
Let's Go Mets
R & J Records




Solution is on page 60

# LOGIC PROBLEM

by Randall L. Whipkey

## 15. THE MIDWAY OF MIDWAY

When the weekend rolls around in Midway, the most popular place to be on a Saturday afternoon is The Midway of Midway. Here you can find all kinds of strange and unusual performances. Freaks of nature, daredevils, weird talents, anything is possible at The Midway of Midway. Six young couples decided to go together to The Midway. As the parking is difficult, they all piled into two cars. When they arrived, at 12:10 p.m., they could find parking only in the lot marked "3-hour parking." Since they planned on eating first, they figured this would give them from 1:00 to 3:00 to see the shows and enough time to return to the cars. There were six different shows to be seen, each had performances scheduled one-half hour apart, at 1:00, 1:30, 2:00, and so on, so that the couples could not see all six shows. When they found they couldn't agree on what four to see, the couples decided to go their separate ways, agreeing to meet back at the cars at 3:10. Each couple saw exactly four performances. Oddly, at each performance, no two couples saw the same show, each viewing a different attraction at each of the four times available to them. From the following clues, can you determine who dated whom and what four of the six shows each couple saw at each of the four performance times available to them?

1. Barry and his date saw Azbesto the Fire Eater at the same time Tom and his date saw Brobdingnag the Tallest Man, Sue and her date saw Zoro the Sword Swallower, and Jenny and her date saw Hercule the Strong Man.
2. Eddie and his date watched Medusa the Snake Charmer's act at the same time Linda and her date were seeing Illustro the Tattooed Man, Ralph and his date were seeing Azbesto, and Kim and her date were watching Brobdingnag.
3. Dick and his date saw Illustro at one of the first three performances.
4. Carol and her date particularly enjoyed Medusa's act; Jenny's date has a phobia about snakes, so they bypassed the Snake Charmer's show, as did Tom and his date.
5. Two couples, Barry and his date and Kim and her date, did not see Hercule's performance.
6. At the same time as Ralph and his date saw Zoro, Tom and his date saw Hercule, Eddie and his date saw Azbesto, Sue and her date saw Medusa, and Kim and her date saw Illustro.
7. Ralph and his date saw Brobdingnag at an earlier show than Dick and his date did.
8. Kim and her date, who was not Frank, saw Zoro's act.
9. Eddie and his date watched Medusa's performance at an earlier show than Frank and his date.
10. Barry and his date saw Azbesto's act at the show immediately following the one Alice and her date saw.

**Solution is on page 64.**

**In solving this Problem, we found the chart below to be most helpful. If you enter the information as you discover it, you will be able to eliminate possibilities presented by the clues.**

| couples | 1:00 | 1:30 | 2:00 | 2:30 |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

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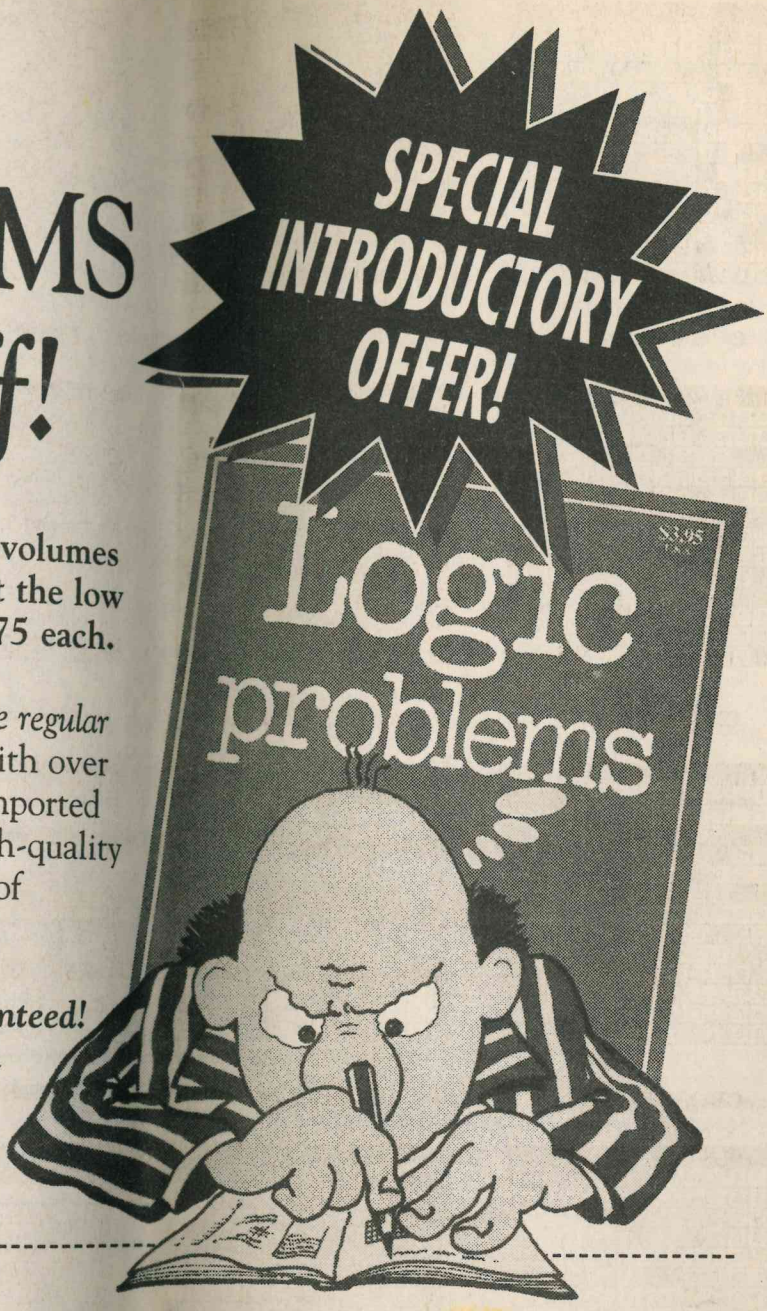


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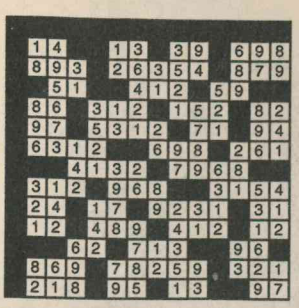

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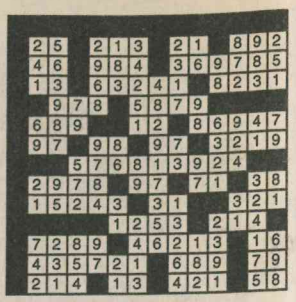

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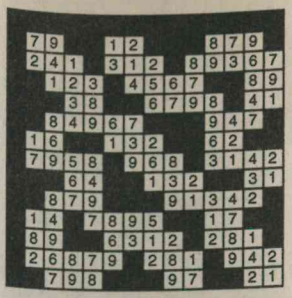

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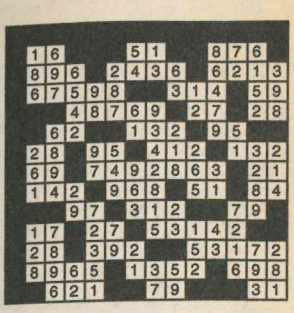

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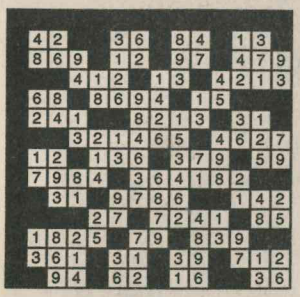

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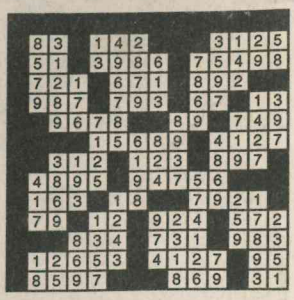

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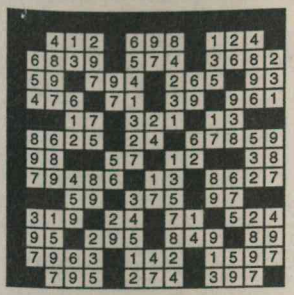

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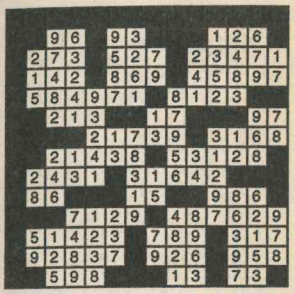

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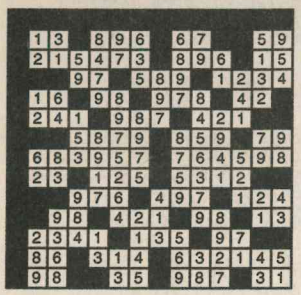

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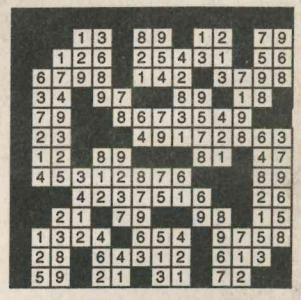

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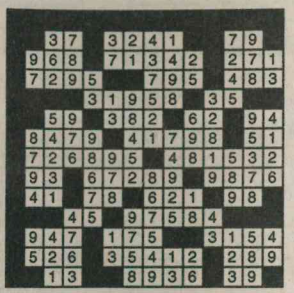

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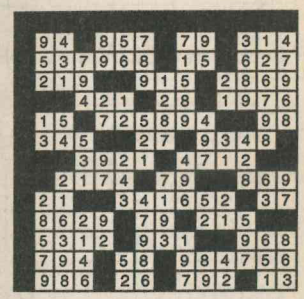

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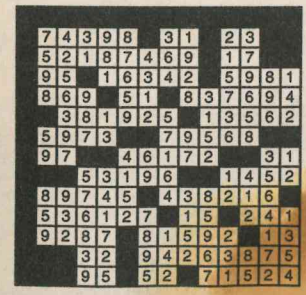

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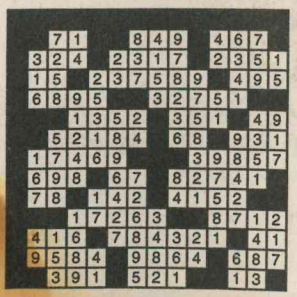

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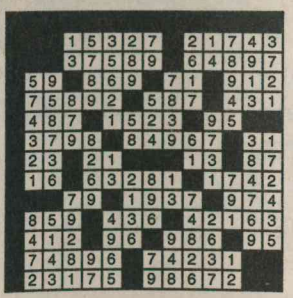

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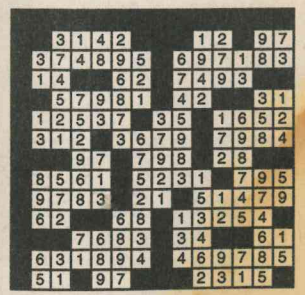

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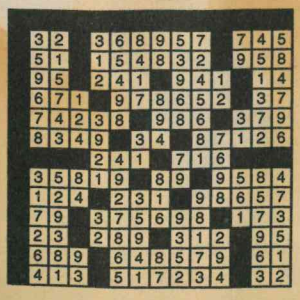
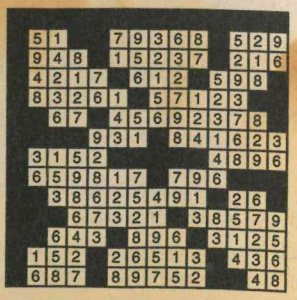


## CROSS SUMS 18



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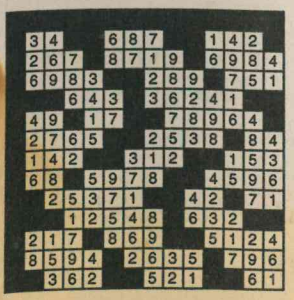

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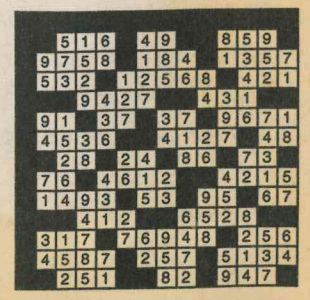


## FIGURE LOGIC 1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3 | 4 | | 1 | 3 | 2 | | 2 | 5 |
| 1 | 2 | 7 | 4 | | 1 | 2 | 5 | 4 |
| | 0 | | 1 | 1 | 2 | | 0 | |
| 7 | 6 | 5 | | 1 | | 4 | 8 | 5 |
| 4 | | 2 | 1 | | 1 | 4 | | 3 |
| 1 | 4 | 3 | | 1 | | 1 | 2 | 3 |
| | 2 | | 6 | 3 | 6 | | 3 | |
| 2 | 3 | 0 | 3 | | 4 | 6 | 0 | 6 |
| 2 | 6 | | 3 | 5 | 3 | | 8 | 8 |

## FIGURE LOGIC 2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 3 | 7 | | 5 | 5 | 3 | |
| 1 | 4 | 8 | 9 | | 6 | 2 | 8 | |
| 9 | 3 | | 1 | 6 | 4 | | 7 | 9 |
| 1 | 7 | 2 | 0 | 9 | | 3 | 1 | 4 |
| | | 2 | 2 | | 1 | 5 | | |
| 1 | 1 | 6 | | 3 | 9 | 5 | 5 | 1 |
| 6 | 4 | | 2 | 6 | 3 | | 2 | 1 |
| | 4 | 8 | 3 | | 5 | 3 | 6 | 0 |
| | 9 | 4 | 2 | | 5 | 4 | | |

## FIGURE LOGIC 3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 5 | 7 | | 9 | 8 | 3 | | 3 | 1 |
| 6 | 8 | 3 | 1 | | 2 | 8 | 4 | 9 |
| | 4 | | 4 | 2 | 7 | | 2 | |
| 1 | 9 | 2 | | 1 | | 2 | 1 | 4 |
| 0 | | 1 | 3 | | 5 | 3 | | 0 |
| 9 | 6 | 3 | | 9 | | 3 | 7 | 7 |
| | 8 | | 6 | 5 | 5 | | 3 | |
| 6 | 8 | 4 | 2 | | 6 | 8 | 4 | 1 |
| 6 | 1 | | 4 | 1 | 0 | | 9 | 1 |

## FIGURE LOGIC 4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2 | 4 | 7 | | 9 | | 4 | 9 | 4 |
| 6 | | 3 | 5 | 8 | 4 | 0 | | 8 |
| 9 | 7 | | 5 | 1 | 0 | | 6 | 7 |
| | 2 | 1 | 1 | | 7 | 7 | 0 | |
| 1 | 8 | 7 | | | | 5 | 2 | 3 |
| | 4 | 9 | 3 | | 8 | 1 | 9 | |
| 5 | 7 | | 4 | 9 | 1 | | 4 | 8 |
| 0 | | 8 | 7 | 6 | 4 | 5 | | 8 |
| 3 | 2 | 7 | | 2 | | 4 | 8 | 1 |

## FIGURE LOGIC 5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 1 | 5 | 2 | | | | |
| | 2 | 1 | 6 | | 7 | 5 | 7 | |
| | 2 | 8 | 6 | 5 | | 7 | 0 | |
| 5 | 3 | | | 4 | | 3 | 9 | 3 |
| 9 | | 2 | 3 | | 1 | 0 | | 8 |
| 3 | 8 | 9 | | 4 | | | 2 | 2 |
| | 2 | 6 | | 1 | 1 | 4 | 6 | |
| | 1 | 5 | 7 | | 1 | 2 | 3 | |
| | | | 6 | 6 | 9 | | | |

## FIGURE LOGIC 6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 0 | | 4 | 2 | 1 | | 1 | 5 |
| 4 | | 4 | 4 | 4 | | 7 | 8 | 8 |
| 1 | 1 | 1 | | 3 | 6 | 7 | | 2 |
| | 6 | 6 | 7 | | | 9 | 1 | |
| 3 | 1 | | 8 | 0 | 9 | | 6 | 3 |
| | 5 | 3 | | | 3 | 6 | 1 | |
| 7 | | 2 | 5 | 1 | | 2 | 8 | 2 |
| 2 | 5 | 3 | | 1 | 2 | 5 | | 5 |
| 9 | 4 | | 9 | 4 | 3 | | 8 | 0 |

## FIGURE LOGIC 7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 2 | 5 | | 4 | 5 | | |
| | 3 | 7 | 7 | | 1 | 5 | 1 | |
| 3 | 4 | 5 | 6 | 7 | 8 | | 4 | 1 |
| 8 | 1 | | 1 | 2 | | 8 | 4 | 4 |
| | | 1 | 3 | | 5 | 2 | | |
| 2 | 1 | 1 | | 7 | 7 | | 2 | 6 |
| 9 | 6 | | 1 | 7 | 2 | 8 | 3 | 9 |
| | 3 | 5 | 1 | | 1 | 4 | 3 | |
| | | 6 | 2 | | 3 | 1 | | |

## FIGURE LOGIC 9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 7 | 3 | | 5 | 1 | | |
| | 8 | 1 | 6 | | 1 | 0 | 2 | |
| 1 | 8 | 4 | 9 | 6 | 0 | | 7 | 2 |
| 9 | 4 | | 9 | 8 | | 3 | 2 | 3 |
| | | 3 | 2 | | 8 | 4 | | |
| 1 | 1 | 9 | | 1 | 3 | | 9 | 5 |
| 4 | 3 | | 3 | 7 | 5 | 9 | 6 | 2 |
| | 6 | 5 | 7 | | 2 | 8 | 9 | |
| | | 3 | 4 | | 1 | 6 | | |

## FIGURE LOGIC 10

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2 | | | 2 | 1 | | 5 | 3 | 2 |
| 9 | 1 | | | 5 | 2 | | 9 | 8 |
| 4 | 4 | 1 | | 8 | 2 | 1 | 6 | |
| | 7* | 0 | 7 | | | 1 | 9 | 7 |
| 3 | | 2 | 7 | 7 | 8 | 3 | | 0 |
| 7 | 4 | 9 | | | 8 | 0 | 5 | |
| | 3 | 0 | 8 | 7 | | 3 | 4 | 3 |
| 1 | 1 | | 4 | 9 | | | 6 | 3 |
| 7 | 2 | 8 | | 1 | 4 | | | 6 |

## SQUARE LOGIC

| | | | | | |
|---|---|---|---|---|---|
| 6 | 25 | 19 | 18 | 7 | 36 |
| 32 | 11 | 20 | 14 | 29 | 5 |
| 33 | 27 | 16 | 22 | 10 | 3 |
| 4 | 28 | 15 | 21 | 9 | 34 |
| 35 | 8 | 17 | 23 | 26 | 2 |
| 1 | 12 | 24 | 13 | 30 | 31 |

## NUMBER PLACE 1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 3 | 9 | 2 | 6 | 7 | 5 | 1 | 4 | 8 |
| 7 | 1 | 4 | 8 | 9 | 2 | 3 | 5 | 6 |
| 5 | 6 | 8 | 3 | 1 | 4 | 7 | 9 | 2 |
| 2 | 7 | 9 | 5 | 8 | 3 | 6 | 1 | 4 |
| 8 | 4 | 6 | 7 | 2 | 1 | 9 | 3 | 5 |
| 1 | 5 | 3 | 9 | 4 | 6 | 2 | 8 | 7 |
| 9 | 2 | 5 | 4 | 3 | 7 | 8 | 6 | 1 |
| 6 | 3 | 7 | 1 | 5 | 8 | 4 | 2 | 9 |
| 4 | 8 | 1 | 2 | 6 | 9 | 5 | 7 | 3 |

## NUMBER PLACE 2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2 | 3 | 6 | 4 | 9 | 8 | 7 | 1 | 5 |
| 5 | 7 | 8 | 1 | 6 | 2 | 4 | 3 | 9 |
| 4 | 1 | 9 | 7 | 3 | 5 | 6 | 2 | 8 |
| 9 | 8 | 4 | 5 | 2 | 1 | 3 | 6 | 7 |
| 3 | 5 | 1 | 6 | 4 | 7 | 8 | 9 | 2 |
| 6 | 2 | 7 | 9 | 8 | 3 | 1 | 5 | 4 |
| 1 | 4 | 2 | 3 | 7 | 9 | 5 | 8 | 6 |
| 8 | 6 | 5 | 2 | 1 | 4 | 9 | 7 | 3 |
| 7 | 9 | 3 | 8 | 5 | 6 | 2 | 4 | 1 |

## NUMBER PLACE 3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 4 | 9 | 3 | 5 | 8 | 7 | 6 |
| 6 | 8 | 5 | 4 | 7 | 1 | 3 | 9 | 2 |
| 3 | 7 | 9 | 2 | 6 | 8 | 4 | 1 | 5 |
| 4 | 1 | 7 | 5 | 8 | 2 | 6 | 3 | 9 |
| 9 | 3 | 2 | 1 | 4 | 6 | 5 | 8 | 7 |
| 8 | 5 | 6 | 3 | 9 | 7 | 2 | 4 | 1 |
| 7 | 6 | 1 | 8 | 5 | 4 | 9 | 2 | 3 |
| 2 | 4 | 3 | 6 | 1 | 9 | 7 | 5 | 8 |
| 5 | 9 | 8 | 7 | 2 | 3 | 1 | 6 | 4 |

## BLACK MAGIC 1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | 2 | | 3 | 3 | | 1 | | |
| | | 0 | | | | | | |
| | | | | 2 | | 4 | | |
| | | | | | | 4 | | |
| | | | | | 0 | | | |
| | | | | | | 2 | | |

## BLACK MAGIC 2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 0 | | 0 | | | |
| | | 2 | | | | 2 | | |
| | | 1 | | 3 | | 1 | | |
| | 0 | | | | | | 0 | |
| | | | | 3 | | | | |
| | 2 | | | 2 | | 2 | 1 | |
| | | 2 | | 0 | | 1 | | |

## NUMBER PLACE 4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4 | 1 | 6 | 5 | 8 | 7 | 9 | 2 | 3 |
| 9 | 5 | 7 | 6 | 2 | 3 | 1 | 4 | 8 |
| 3 | 2 | 8 | 9 | 4 | 1 | 6 | 5 | 7 |
| 7 | 9 | 4 | 3 | 1 | 6 | 5 | 8 | 2 |
| 1 | 3 | 2 | 4 | 5 | 8 | 7 | 9 | 6 |
| 6 | 8 | 5 | 2 | 7 | 9 | 4 | 3 | 1 |
| 2 | 7 | 1 | 8 | 9 | 5 | 3 | 6 | 4 |
| 8 | 6 | 9 | 7 | 3 | 4 | 2 | 1 | 5 |
| 5 | 4 | 3 | 1 | 6 | 2 | 8 | 7 | 9 |

## NUMBER PLACE 5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 5 | 3 | 7 | 9 | 1 | 2 | 4 | 6 | 8 |
| 8 | 4 | 9 | 5 | 6 | 3 | 2 | 1 | 7 |
| 1 | 6 | 2 | 4 | 8 | 7 | 3 | 9 | 5 |
| 2 | 7 | 1 | 8 | 3 | 6 | 9 | 5 | 4 |
| 4 | 9 | 8 | 2 | 5 | 1 | 7 | 3 | 6 |
| 6 | 5 | 3 | 7 | 9 | 4 | 8 | 2 | 1 |
| 7 | 1 | 4 | 3 | 2 | 5 | 6 | 8 | 9 |
| 3 | 8 | 5 | 6 | 7 | 9 | 1 | 4 | 2 |
| 9 | 2 | 6 | 1 | 4 | 8 | 5 | 7 | 3 |

## NUMBER PLACE 6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 6 | 1 | 8 | 7 | 4 | 2 | 9 | 5 | 3 |
| 3 | 5 | 9 | 8 | 6 | 1 | 7 | 2 | 4 |
| 4 | 7 | 2 | 9 | 5 | 3 | 6 | 1 | 8 |
| 1 | 3 | 6 | 4 | 9 | 5 | 2 | 8 | 7 |
| 9 | 4 | 7 | 1 | 2 | 8 | 3 | 6 | 5 |
| 2 | 8 | 5 | 3 | 7 | 6 | 4 | 9 | 1 |
| 7 | 6 | 4 | 5 | 8 | 9 | 1 | 3 | 2 |
| 5 | 2 | 1 | 6 | 3 | 4 | 8 | 7 | 9 |
| 8 | 9 | 3 | 2 | 1 | 7 | 5 | 4 | 6 |

## CROSS NUMBERS 1

| | | | | | |
|---|---|---|---|---|---|
| 1 | + | 9 | X | 5 | 50 |
| + | | ÷ | | + | |
| 4 | + | 3 | X | 7 | 49 |
| X | | X | | ÷ | |
| 6 | + | 8 | – | 2 | 12 |
| 30 | | 24 | | 6 | |

## CROSS NUMBERS 2

| | | | | | |
|---|---|---|---|---|---|
| 3 | ÷ | 1 | X | 7 | 21 |
| X | | + | | X | |
| 9 | – | 6 | X | 5 | 15 |
| + | | + | | – | |
| 2 | X | 8 | + | 4 | 20 |
| 29 | | 15 | | 31 | |

## BINGO PLAYS 1

| | B | I | N | G | O | |
|---|---|---|---|---|---|---|
| P | 8 | (16) | 45 | 60 | 65 | P |
| L | 11 | (17) | 32 | 57 | 63 | L |
| A | 15 | (18) | FREE | 54 | 61 | A |
| Y | 2 | (29) | 40 | 47 | 72 | Y |
| S | 4 | (30) | 31 | 46 | 70 | S |
| | B | I | N | G | O | |

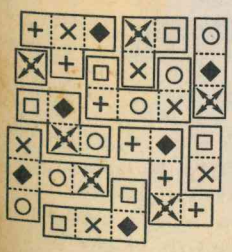
## BINGO PLAYS 2

| | B | I | N | G | O | |
|---|---|---|---|---|---|---|
| P | 14 | 30 | 38 | 49 | (61) | P |
| L | 15 | 29 | 35 | (50) | 63 | L |
| A | 12 | 22 | (FREE) | 52 | 65 | A |
| Y | 13 | (17) | 45 | 53 | 67 | Y |
| S | (6) | 20 | 40 | 57 | 69 | S |
| | B | I | N | G | O | |

## BINGO PLAYS 3

| | B | I | N | G | O | |
|---|---|---|---|---|---|---|
| P | 15 | 16 | 31 | 56 | 62 | P |
| L | 13 | 17 | 44 | 46 | 69 | L |
| A | 14 | 18 | FREE | 49 | 68 | A |
| Y | 9 | 20 | 40 | 51 | 71 | Y |
| S | (3) | (26) | (36) | (58) | (73) | S |
| | B | I | N | G | O | |

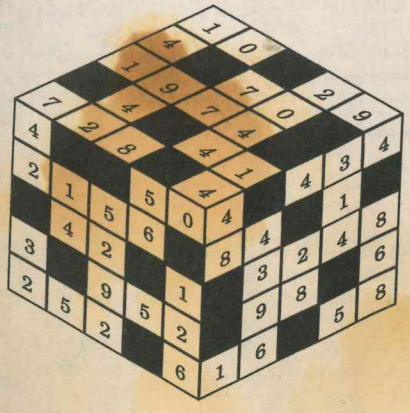
## JIGSAW LOGIC



## SUM LOGIC

| | | | | |
|---|---|---|---|---|
| 10 | 59 | 1 | 21 | 6 |
| 7 | 20 | 50 | 19 | 1 |
| 34 | 2 | 16 | 25 | 20 |
| 5 | 15 | 4 | 27 | 46 |
| 41 | 1 | 26 | 5 | 24 |

## FIGURE LOGIC 8



*Your solution may be an upside-down version of this one.*

## LOGIC PROBLEM 1

The green page and the red page were, in some order, pages two and three (clue 1). The blue page was page four and the rodeo picture was on page three (clue 2). The page that showed Burgie dancing was page four (clue 4). By clue 3, the sailing picture was on page two and, since it was not colored red, it was colored green and the rodeo picture was colored red. By elimination, Zachy colored the baseball picture on page one yellow. In sum:

Page 1: baseball, yellow
Page 2: sailing, green
Page 3: rodeo, red
Page 4: dancing, blue

## LOGIC PROBLEM 2

The Lawter boy won first prize with his poem, "Summer Fun" (clue 1). He is not Eddie (clue 3), so he is the only other boy, George. By clue 3, the Peters child came in second, and Eddie placed third with his poem, "The Moon." Mary is Peters, Eddie is Newell, and the author of "My Mom" placed fourth (clue 2). Jane was not fifth (clue 4), so she was fourth and, by elimination, Louise was fifth. Jane is not Mann (clue 4); Louise is. By elimination, Jane is the Olsen child. Louise Mann did not write "My Dog" (clue 4); Mary Peters did and, by elimination, Louise wrote "I Love Clowns." In sum:

1st: George Lawter, "Summer Fun"
2nd: Mary Peters, "My Dog"
3rd: Eddie Newell, "The Moon"
4th: Jane Olsen, "My Mom"
5th: Louise Mann, "I Love Clowns"

## LOGIC PROBLEM 3

All five players are mentioned in clue 1 — Eddie, Al, Mr. Roper, Mr. Tolleson, and the hockey player. Mr. Quick is not Al or the hockey player (clue 6); he is Eddie. He does not play football (clue 4), basketball or soccer (clue 2); he is the baseball player. Al does not play basketball or soccer (clue 8); he plays football. Mr. Roper's sport is not soccer (clue 5); he plays basketball. By elimination, Mr. Tolleson's sport is soccer. Chuck is not Roper or Tolleson (clue 5), or Sands (clue 7); he is Palmer and, by elimination, he is the hockey player. Tolleson is not Benny (clue 3); he is Don. By elimination, Roper is Benny and Sands is Al. In sum:

Chuck Palmer, hockey
Eddie Quick, baseball
Benny Roper, basketball
Al Sands, football
Don Tolleson, soccer

## LOGIC PROBLEM 4

The student who placed first was not from Queens (clue 1), Staten Island (clue 2), the Bronx (clue 3), or Manhattan (clue 5); the student from Brooklyn placed first. The student who placed last was not from Queens (clue 1), the Bronx (clue 3) or Manhattan (clue 5); that student was from Staten Island. Debby is not from Queens (clue 1), Brooklyn or Staten Island (clue 4), or the Bronx (clue 7); she is from Manhattan. She did not place first (clue 5), nor did Ernest (clue 1), Ann (clue 2), or Cora (clue 6); Bob did, and he is from Brooklyn. Ann is not from Staten Island (clue 2) or the Bronx (clue 7); she is from Queens. Cora is not from the Bronx (clue 3), so Ernest is. By elimination, Cora is from Staten Island, and placed fifth. Bob is not Jones (clue 1), Marsden (clue 2), Gray (clue 3), or Hanson (who, by the introduction is a girl); he is Klock. By clue 1, the Jones student placed second, Ann placed third, and Ernest placed fourth. By elimination, Debby placed second. Ernest is not Hanson (introduction) or Gray (clue 3); he is Marsden. Cora is Gray (clue 3). By elimination, Ann is Hanson. In sum:

1st: Bob Klock, Brooklyn
2nd: Debby Jones, Manhattan
3rd: Ann Hanson, Queens
4th: Ernest Marsden, the Bronx
5th: Cora Gray, Staten Island

## LOGIC PROBLEM 5

There are only two boys mentioned. Joe is not the boy who enjoys Memorial Day because school will soon be over (clue 3), so Eric is. There are only two holidays mentioned that come in the same month, Mother's Day and Memorial Day. By clue 5, then, Tammy is the child who enjoys Mother's Day, and Eric's last name is Beldon. By clue 2, the Klos boy, who is Joe, enjoys Father's Day and Amy enjoys Independence Day. The child who enjoys Labor Day is, by elimination, Suzi, who does so because her family goes to the beach for a picnic. By clue 4, Joe Klos enjoys Father's Day because his family spends the day at his grandparents' farm, and Amy's surname is Wilk. By clue 1, Tammy's last name is Marx, and Amy Wilk enjoys Independence Day because her family goes to the county fair. By elimination, Suzi's surname is Strom, and Tammy enjoys Mother's Day because her family dines at a fancy restaurant. In sum:

Tammy Marx, Mother's Day, restaurant
Eric Beldon, Memorial Day, school ending
Joe Klos, Father's Day, grandparents' farm
Amy Wilk, Independence Day, county fair
Suzi Strom, Labor Day, picnic at the beach

## LOGIC PROBLEM 6

The Kanes live in #103 (clue 3). The Byrds and Parkers (clue 4), Altons (clue 7) and Ryders (clue 8) live in the four corner houses. By clue 2, the Jetts live in #104 and the O'Briens live in #102. By elimination, the Chiltons live in #105. By clue 6, the Byrds live in #106 or #107. If the Byrds live in #107, the Parkers would live in #100 (clue 4). The Altons would then be in #101 (clue 7), directly across from the Parkers. This, however, contradicts the second part of clue 7. Therefore, the Byrds live in #106 and the Parkers in #101. The family in #107 is the Altons (clue 7) and, by elimination, the last house, #100, is occupied by the Ryders. The Kanes have only a cat (clue 3). By clue 4, the Byrds have both a cat and a dog; the Altons and the Ryders each have only a dog (clue 5). By clue 2, the Chiltons have only a dog. The Parkers have a dog (clue 4). By clue 1, the Jetts and the O'Briens each have only a cat and the Parkers must also have a cat. In sum:

#100: Ryders, dog
#101: Parkers, cat and dog
#102: O'Briens, cat
#103: Kanes, cat
#104: Jetts, cat
#105: Chiltons, dog
#106: Byrds, cat and dog
#107: Altons, dog

## LOGIC PROBLEM 7

Ms. Clark spent $25 for a lamp, and another woman spent $30 (clue 3). The $30 item was not the vase or the box (clue 5), or the picture (clue 4); it was the chair. By clue 1, since the chair buyer had $5 left, and Ms. Clark, $10 (clue 3), Suzanne is Ms. Clark, and Ms. Marx had $20 left and thus spent $15. The most expensive item was not the vase or the box (clue 5), or the picture (clue 4); it was the chair. By clue 5, the box cost $15 or less. If it cost less than $15, with Brenda's vase still less, there would have to be a sixth item with a price twice that of the box (clue 5). Therefore, the box was the $15 item Ms. Marx purchased, and the vase Brenda bought cost less than $15. By clue 4, since Marie didn't buy the picture, she bought either the chair or the box. If she bought the box, the one who bought the picture would have $60 left, which is more than $35. Therefore, Marie bought the chair, and the woman who bought the picture had $15 left, which means she spent $20. By clue 2, Cindy did not take home $20, so she is not Ms. Marx. Cindy bought the $20 picture (taking home $15), and Ms. Valley is Marie (also clue 2). By elimination, Ms. Marx is Vicky. By clue 6, Ms. Walsh is Cindy, and Brenda's vase cost $10. By elimination, Brenda is Ms. Day. In sum:

Marie Valley, $30 chair
Suzanne Clark, $25 lamp
Cindy Walsh, $20 picture
Vicky Marx, $15 box
Brenda Day, $10 vase

## LOGIC PROBLEM 8

No ambassador was appointed to the country where he can speak the language fluently. The ambassador to Italy, then, does not speak Italian, nor does he speak Russian or German (clue 2) or Spanish (clue 4). He speaks French. Howard does not speak Russian, German, or French (clue 2) or Italian (clue 5); he is fluent in Spanish. Mr. Kreech is not Peter or Erwin (clue 1), or Randy or Howard (clue 4); he is Alan. Since all five men are mentioned in clue 5, one of them is the French-speaking ambassador to Italy. He is not Alan Kreech or the Spanish-speaking Howard (clue 4), so he is Mr. Carter. The ambassador to Spain is not Alan, Peter, or Erwin (clue 1), nor is he Howard, since Howard speaks Spanish. Randy will serve in Spain. Randy is one of the men mentioned in clue 5, so he is the Italian-speaking ambassador. Randy is not Mr. Vance (clue 3) or Mr. Stamey (clue 4); he is Mr. Morley. Howard is not Mr. Stamey (clue 4); he is Mr. Vance. Howard Vance is not ambassador to France (clue 3) or to Russia (clue 5); he will serve in Germany. Alan Kreech is not ambassador to Russia (clue 5); he will serve in France. Mr. Stamey is ambassador to Russia. Mr. Stamey, then, does not speak Russian; he speaks German. By elimination, Mr. Kreech speaks Russian. Mr. Stamey is not Peter (clue 6); he is Erwin, and Peter is Mr. Carter. In sum:

Peter Carter, speaks French, in Italy
Alan Kreech, speaks Russian, in France
Randy Morley, speaks Italian, in Spain
Erwin Stamey, speaks German, in Russia
Howard Vance, speaks Spanish, in Germany

## LOGIC PROBLEM 9

The Newells live on the tennis-court side (clue 5), as do the Riders (clue 9) and the Parkers (clue 12). Agatha, who lives between the Parkers and the Riders (clue 2), is Mrs. Newell and lives in #2. Laura, then, is in #3 (clue 5). By clue 8, Kate is also on the tennis-court side, so she lives in #1. Her last name is not Rider (also clue 8), so it is Parker, and Laura is Mrs. Rider. Harriet lives in either #5 or #6 (clue 6), as does Carol (clue 7), so, by elimination, Frances is the woman in #4. Edward lives on the tennis-court side (clue 4), as do Ira (clue 1) and Bruce (clue 3). Kate Parker's husband is neither Bruce (clue 8) nor Edward (clue 11), so he is Ira. Bruce is not Agatha Newell's husband (clue 3), so Edward is, and Bruce is Mr. Rider. Since Frances lives in #4, by clue 10, Donald lives in #5 and the O'Brians live in #6. By clue 6, then, Mrs. Minton is Frances and Harriet is Donald's wife; Carol, then, is Mrs. O'Brian. And, since Jeffrey isn't Mr. Minton (also clue 6), he is Mr. O'Brian. By elimination, Mr. Minton is George, and Donald and Harriet are the Quades. In sum:

#1: Kate and Ira Parker
#2: Agatha and Edward Newell
#3: Laura and Bruce Rider
#4: Frances and George Minton
#5: Harriet and Donald Quade
#6: Carol and Jeffrey O'Brian

## LOGIC PROBLEM 10

Since 25 points separated the closing prices of the third-highest and lowest-priced stocks (clue 4), and 5 points separated Black Gold from the lowest-priced stock (clue 3), Black Gold sold for the fourth-highest price. If Zeroz were the highest-priced stock, by clue 1 it would be worth only 20, which is two times the 10-point difference between its price and that of Polk; but since clue 4 tells us that there was a 25-point difference between two of the stocks, the highest-priced stock closed above 20 points and is not Zeroz. Since neither Polk (clue 1) nor Siding Aluminum (clue 2) sold highest, Nadir Markets' stock did. By clue 1, Polk sold at less than Zeroz and at half the price of Nadir; Siding sold at one-quarter of Nadir's price (clue 2). Zeroz, Polk, and Siding, then, closed second-highest, third-highest, and lowest, in that order. Since Nadir's closing price was four times that of Siding's (clue 2) and two times that of Polk's (clue 1). Polk's closing price was two times that of Siding's. By clue 4, we know that Polk closed 25 points higher than Siding, so Polk's closing price was two times 25 — or 50 — while Siding closed at 25 points. Nadir's price, then, was 100 (clue 2), Zeroz's 60 (clue 1), and Black Gold's 30 (clue 3). The stock that increased the most wasn't Zeroz's (clue 1), Siding's (clue 2), Black Gold's (clue 3), or Nadir's (clue 5), so it was Polk Motor's. Since the lowest increase was 2 points (clue 3), Zeroz's stock did not increase least (clue 1), nor did Nadir Markets' stock (clue 2), or Black Gold's (clue 5). Siding Aluminum, then, increased least, by 2 points. Nadir was up, then, 4 (clue 2), Black Gold up 5 (clue 5), Polk up 10 (clue 3), and Zeroz up 8 (clue 1). In sum:

Nadir Markets, up 4 to 100
Zeroz Corporation, up 8 to 60
Polk Motors, up 10 to 50
Black Gold Petroleum, up 5 to 30
Siding Aluminum, up 2 to 25

## LOGIC PROBLEM 11

By combining clues 4 and 5, the order of performances is as follows: first, Claudia's husband and Sharon; second, Marty and Mrs. Smith; third, Mr. Smith alias "Juda Jewel"; fourth, John alias "Flash"; last, the lion tamer and Claudia. Sharon's partner (Claudia's husband) is Harry (clue 2). Also by clue 2, the Beaches are Marty and Marsha, and Christine's last name is Miller, so the Smiths are Fred and Nancy. By elimination, Dan is in the last act. The next-to-last female performer is not Christine Miller (clue 1), so she is Marsha Beach, and Christine is Fred Smith's partner. By clue 2, the latter's husband is neither John alias "Flash" nor Harry, so he is Dan and his alias is "Skip." Harry and Claudia aren't the Hogans (clue 2), so they are the Herons, and John and Sharon are the Hogans. Harry isn't "Dancy Dart" (clue 3), so he is "Pompy," and "Dancy Dart" is Marty Beach. Since Sharon Hogan is Harry Heron's partner, he is the trapeze artist (clue 2). John alias "Flash" is neither the elephant trainer nor the clown (clue 7), so he is the bareback rider. Nancy's husband Fred isn't the elephant trainer (clue 6); he is the clown, and Marty Beach is the elephant trainer. In sum, the acts in order of performance are:

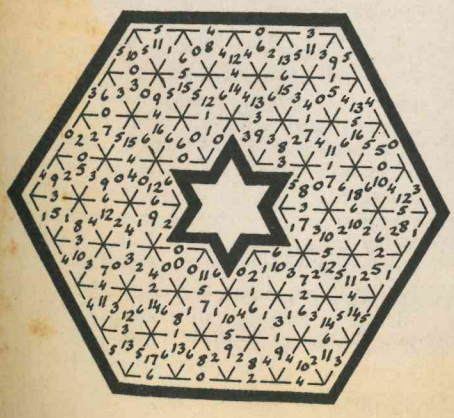
Harry "Pompy" Heron, trapeze artist, and Sharon Hogan
Marty "Dancy Dart" Beach, elephant trainer, and Nancy Smith
Fred "Juda Jewel" Smith, clown, and Christine Miller
John "Flash" Hogan, bareback rider, and Marsha Beach
Dan "Skip" Miller, lion tamer, and Claudia Heron

## LOGIC PROBLEM 12

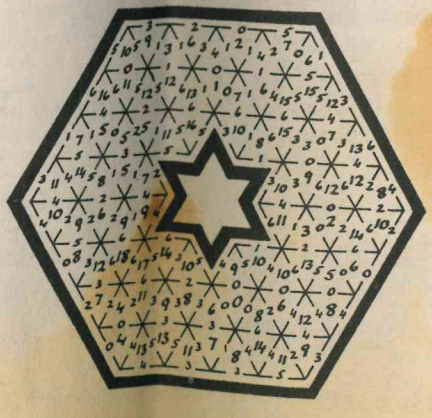
Clue 4 lists all six girls: one — the tennis player, who has been taking lessons for five months; two — Sue and the skater, both of whom have been taking lessons for less than five months; and three — Ginger, the swimmer, and the one who has taken lessons for twenty months, all three of whom have been at their activities longer than five months. By clue 5, the dancer has taken lessons longer than at least two of the others, and the number of months she has been studying is divisible by two and also by three, so she is not the one taking lessons for twenty months; she is Ginger. By clue 1, then, her last name is Sweet, and Jenny takes piano lessons; the latter is the girl who has been taking lessons for twenty months. Sue, by elimination, is taking golf lessons, so her surname is Baker (clue 3). Cathy Brown, who has taken lessons for at least 11 months (clue 3), is the swimmer. By clue 5, dancer Ginger Sweet (who has taken lessons for more than five months) has taken lessons three times as long as Sue Baker (who has taken lessons for fewer than five months) and also twice as long as another girl. There are just two possibilities: Ginger has taken lessons for six months and Sue for two, or Ginger has taken lessons for twelve months and Sue for four. By clue 3, Ginger has taken lessons four months longer than Sue. By clues 3 and 5, then, Ginger has taken lessons for six months, Sue for two, and Cathy for twelve. The Johnson girl, who has taken lessons for only three months (clue 5), is the skater. By clue 2, the Jensen girl is the tennis player and her first name is Barb, while Laurie is the Johnson girl. Jenny's last name, by elimination, is Smith. In sum:

Sue Baker, golf, 2 months
Cathy Brown, swimming, 12 months
Barb Jensen, tennis, 5 months
Laurie Johnson, skating, 3 months
Jenny Smith, piano, 20 months
Ginger Sweet, dancing, 6 months

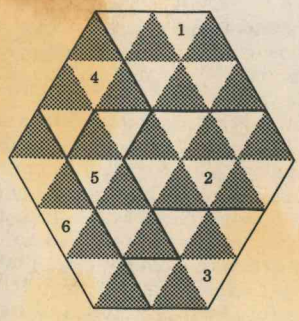
## TRIGONS 1



## TRIGONS 2



## TRACE ELEMENTS



## LOGIC PROBLEM 13

By clue 4, "Age of Sagittarius" was not #1 either the first or second week, nor could it have been #1 the fourth or fifth week since it could not have been in second place in the fifth week (clue 5), so it was #1 the third week and #2 the first week. "Evening Has Shattered" was not #1 the first week (clue 3), so, by clue 1, it was #3 and "Beverly's Song" was #4; "Tiptoe Through the Violets" was not #1 (clue 5), so it was #5, and "Burning Chariots" was #1. "Evening Has Shattered" was not #1 the fourth week (clue 3) or fifth week (clue 6), so it was #1 the second week. By clue 5, "Age of Sagittarius" was either #4 or #5 the fifth week. Since "Burning Chariots" was one place higher than "Evening Has Shattered" that week (clue 6) — i.e., they were respectively either #3 and #4, or #4 and #5 — the only possibility is that "Burning Chariots" was #3, "Evening Has Shattered" was #4, and "Age of Sagittarius" was #5. "Age of Sagittarius" was, then, #4 the fourth week (also clue 5), and, by elimination, #3 the second week. "Tiptoe Through the Violets," which we know was #5 the first week, was #4 the second week (clue 5) and #3 the third week (clue 2). By elimination, #3 the fourth week was "Beverly's Song," and #4 the third week was "Burning Chariots." "Burning Chariots" was #5 the fourth week, and "Evening Has Shattered" was #2 (clue 6); "Tiptoe Through the Violets" was, then, #1 that week. By elimination, the fifth week, "Beverly's Song" was #1 and "Tiptoe Through the Violets" was #2; the second week, "Burning Chariots" was #2 and "Beverly's Song" #5; the third week, "Beverly's Song" was #2 and "Evening Has Shattered" #5. In sum:

| | #1 | #2 | #3 | #4 | #5 |
|---|---|---|---|---|---|
| Week 1: | "Burning Chariots" | "Age of Sagittarius" | "Evening Has Shattered" | "Beverly's Song" | "Tiptoe Through the Violets" |
| Week 2: | "Evening Has Shattered" | "Burning Chariots" | "Age of Sagittarius" | "Tiptoe Through the Violets" | "Beverly's Song" |
| Week 3: | "Age of Sagittarius" | "Beverly's Song" | "Tiptoe Through the Violets" | "Burning Chariots" | "Evening Has Shattered" |
| Week 4: | "Tiptoe Through the Violets" | "Evening Has Shattered" | "Beverly's Song" | "Age of Sagittarius" | "Burning Chariots" |
| Week 5: | "Beverly's Song" | "Tiptoe Through the Violets" | "Burning Chariots" | "Evening Has Shattered" | "Age of Sagittarius" |

## LOGIC PROBLEM 14

We are told that Paula intended to sit at the north end of the table with her husband at the south end, but they ended up just reversed, and that she had intended to alternate men and women, and that is how they ended up — i.e., there were two men and two women on each side of the table. Mr. Truman's first name is not Jim (clue 3), Ken (clue 4), Mark (clue 7), or Bob (clue 9); it is John. Clue 2 states that Mr. and Mrs. Miller, Brenda, and Mr. Brown ended up on the west side of the table (to John's right). Nora, who is not Mrs. Miller (clue 7), sat on the east side. Mr. and Mrs. Washburn ended up next to each other (clue 5), so they sat on the east side of the table. By elimination, the other man on the east side was Mr. Rockford. We know that men and women sat in alternating seats, so Mrs. Miller had to end up either to John Truman's immediate right or — if she was in the other west-side seat occupied by a woman — between her husband and another guest. Amy, then, is not Mrs. Miller (clue 3). Amy was one of the two women on the east side of the table and, since we know the Washburns sat next to each other, Amy is not Mrs. Washburn; Nora is. And since Amy didn't sit at John Truman's immediate left (clue 3), the people who ended up on the east side of the table were, in order from north to south, Nora Washburn, Mr. Washburn, Amy, and Mr. Rockford; Amy is not Mrs. Rockford (clue 3), so she is Mrs. Brown. By elimination, Brenda's last name is Rockford and Mrs. Miller's first name is Joan. By clue 4, Ken ended up at Paula Truman's immediate left. By clue 6, Joan Miller ended up just across from Amy Brown, and by elimination, Brenda Rockford ended up just across from Nora Washburn. By clue 1, Paula had intended to seat husbands and wives on opposite sides of the table. By clue 7, then, Mark is not Mr. Brown, Mr. Miller, or Nora Washburn's husband; he is Mr. Rockford. Mr. Washburn, who sat to Amy's immediate right, is Jim (clue 3). By elimination, Bob ended up just across from Jim. Since, by clue 4, Paula had intended for Ken to be opposite Mark Rockford, Ken isn't Mr. Brown (clue 7); he is Mr. Miller, and Mr. Brown is Bob. We now know all the names, as well as the actual final seating. Paula's plans had called for her to sit at the north end of the table, John at the south end. She had not intended Joan Miller (clue 6), or Brenda Rockford or Nora Washburn (clue 8) to sit immediately to John's left, so the woman she intended for that seat was Amy Brown. Nora and Joan were meant to be on the same side of the table (clue 7), so that was to John's right (on the east side of the table), so Brenda Rockford should have been the other woman on the west side (two places to Amy's left); by clue 6, Nora should have been at John's immediate right, with Joan opposite Brenda. Paula had not intended to sit next to Bob Brown (clue 9), so by clue 7, he should have been between Nora and Joan, with Mark Rockford at Paula's immediate left. Ken Miller, then, should have been at her immediate right (clue 4) and Jim Washburn, by elimination, between Brenda and Amy. In sum:

INTENDED SEATING

Paula Truman

| | |
|---|---|
| Ken Miller | Mark Rockford |
| Brenda Rockford | Joan Miller |
| Jim Washburn | Bob Brown |
| Amy Brown | Nora Washburn |

John Truman

ACTUAL SEATING

John Truman

| | |
|---|---|
| Brenda Rockford | Nora Washburn |
| Bob Brown | Jim Washburn |
| Joan Miller | Amy Brown |
| Ken Miller | Mark Rockford |

Paula Truman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## LOGIC PROBLEM 15

Kim's date wasn't Barry (clue 5), Eddie, Ralph, or Tom (clue 6), or Frank (clue 8); Kim's date was Dick. Sue didn't date Barry (clue 1), Eddie, Ralph, or Tom (clue 6); Sue's date was Frank. Jenny's date was neither Barry nor Tom (clue 1), nor, since she didn't see Medusa's act (clue 4), did she date Eddie, who did (clue 2); Jenny's date was Ralph. Kim and Dick did not see Illustro at 2:30 (clue 3), so Sue and Frank did not see Medusa's act at 2:30 (clue 6). Since Sue and Frank didn't see Medusa's act at 1:00 (clue 9), Kim and Dick also didn't see Illustro at 1:00 (clue 6). Kim and Dick did not see Brobdingnag at 1:00 (clue 7), so Eddie and his date did not see Medusa at 1:00 (clue 2). By clue 9, then, Eddie and his date saw Medusa's act at 1:30 and Sue and Frank at 2:00. Clue 2, then, describes the 1:30 shows, so it was then that Linda and her date saw Illustro, Ralph and Jenny saw Azbesto, and Kim and Dick saw Brobdingnag. Ralph and Jenny saw Brobdingnag at 1:00 (clue 7). Since Sue and Frank saw Medusa's 2:00 show, all the performances in clue 6 took place at that time, and it was then that Ralph and Jenny saw Zoro, Tom and his date saw Hercule, Eddie and his date saw Azbesto, and Kim and Dick saw Illustro — and, by elimination, Barry and his date were at the 2:00 performance of the one remaining show, Brobdingnag. We have accounted for Ralph and Jenny's whereabouts for the first three performance times. Clue 1, in which they are also mentioned, then, describes the 2:30 shows. At 2:30, then, Barry and his date saw Azbesto, Tom and his date saw Brobdingnag, Sue and Frank saw Zoro, and Jenny and Ralph saw Hercule. Alice, then, saw Azbesto at 2:00 (clue 10), so she was Eddie's date. Tom's date was not Carol (clue 4), so she was Linda, and Carol dated Barry. We now know who saw four of the acts at 2:30. The remaining two, Medusa and Illustro, were seen by Kim and Dick, and by Eddie and Alice, not necessarily in that order. We know Eddie saw Medusa at 1:30, so at 2:30 he saw Illustro, and since Kim and Dick saw Medusa (clue 4), they did so at 2:30. Sue and Frank saw Zoro at 2:30; Kim and Dick, then, saw that act at 1:00 (clue 8), the only time still open on their schedule. Barry and Carol saw Medusa (clue 4), and since other couples were watching that act at the later times, they saw it at 1:00. Eddie and Alice saw Hercule (clue 5), so it was at 1:00, the only remaining time slot on their schedule. Frank and Sue saw Hercule, too (also clue 5), so that's where they were at 1:30. By elimination, Barry and Carol were watching Zoro's performance at 1:30. Since Tom and Linda saw Illustro at 1:30, they saw Azbesto's performance at 1:00, and Sue and Frank saw Illustro's 1:00 performance. In sum:

| | 1:00 | 1:30 | 2:00 | 2:30 |
|---|---|---|---|---|
| Barry and Carol | Medusa | Zoro | Brobdingnag | Azbesto |
| Dick and Kim | Zoro | Brobdingnag | Illustro | Medusa |
| Eddie and Alice | Hercule | Medusa | Azbesto | Illustro |
| Frank and Sue | Illustro | Hercule | Medusa | Zoro |
| Ralph and Jenny | Brobdingnag | Azbesto | Zoro | Hercule |
| Tom and Linda | Azbesto | Illustro | Hercule | Brobdingnag |

## CROSSMATH

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | + | 7 | 2 | 1 | ■ | 9 | 1 | − | 6 | 1 | + | 7 | 7 | 6 |
| 7 | 6 | − | 5 | 0 | ■ | − | 2 | 3 | 0 | + | 3 | 5 | 0 | + |
| 8 | 0 | 4 | ÷ | 6 | ■ | 8 | x | 6 | ÷ | 3 | ÷ | 2 | − | 3 |
| ÷ | 7 | + | 5 | ÷ | 3 | ■ | 9 | ÷ | 3 | ■ | 3 | + | 5 | 3 |
| 6 | + | 2 | ■ | 2 | x | 9 | ■ | 6 | x | 8 | + | 2 | 0 | 0 |
| 3 | 5 | x | 1 | − | 4 | + | 7 | ■ | 5 | + | 7 | ■ | ■ | ■ |
| + | 4 | 8 | x | 3 | ■ | 7 | + | 6 | − | 5 | ■ | 6 | x | 6 |
| 5 | 0 | − | 8 | ■ | 6 | ÷ | 2 | x | 6 | ■ | 1 | x | 6 | 0 |
| 3 | x | 8 | ■ | 2 | + | 4 | ÷ | 1 | ■ | 3 | + | 4 | 0 | ÷ |
| ■ | ■ | ■ | 4 | − | 4 | ■ | 3 | x | 8 | ÷ | 4 | + | 1 | 1 |
| 3 | 4 | 8 | ÷ | 2 | − | 6 | ■ | 6 | − | 1 | ■ | 7 | + | 5 |
| 6 | 0 | + | 4 | ■ | 9 | + | 4 | ■ | 2 | + | 7 | − | 3 | + |
| 5 | − | 3 | x | 7 | x | 3 | + | 8 | ■ | 4 | + | 6 | 0 | 2 |
| ÷ | 2 | 0 | 6 | + | 2 | 0 | 7 | − | ■ | 8 | 3 | − | 2 | 0 |
| 5 | 9 | 6 | + | 7 | 4 | + | 1 | 3 | ■ | 3 | 0 | 8 | ÷ | 4 |

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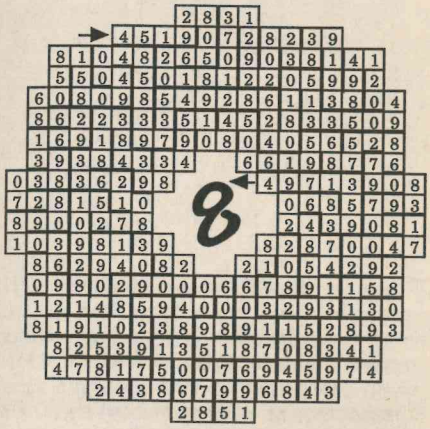


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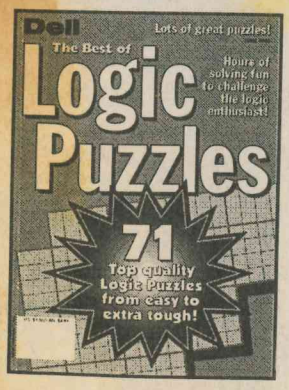
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## WORD ARITHMETIC

| | 0 1 2 3 4 5 6 7 8 9 |
|---|---|
| 1. | B A D/ P O S T U R E |
| 2. | N I G H T M A R E S |
| 3. | D R E A M S/ O F/ I T |
| 4. | G O L D/ B R I C K S |
| 5. | A/ R I T Z Y/ G O W N |
| 6. | S C O R I N G/ P A D |
| 7. | R E L Y/ O N/ C A S H |
| 8. | U N S T E A D I L Y |
| 9. | H I S/ J A W B O N E |
| 10. | P A L E/ O R C H I D |
| 11. | Y O U R/ C L I E N T |
| 12. | P R A T I N C O L E |
| | *(exotic bird)* |
| 13. | B A N K R U P T C Y |
| 14. | P R O C U M B E N T |
| | *(lying face down)* |
| 15. | N I C E/ F A V O R S |
| 16. | C L E A N/ S H I R T |
| 17. | B R O K E N/ G I F T |
| 18. | B L A N K/ F O R M S |
| 19. | C O M P L A I N T S |
| 20. | E N G L I S H/ B O Y |
| 21. | I N/ B A C K/ O F/ U S |
| 22. | M O U S T A C H E D |
| 23. | H E R O I C/ D U T Y |
| 24. | P R O F I T A B L E |
| 25. | B I G/ F U R/ S A L E |
| 26. | C A N D Y/ M I X E R |
| 27. | H U M B L E/ T A S K |
| 28. | D I R E C T/ B L O W |
| 29. | C R U I S E/ B O A T |
| 30. | C A G E D/ L I O N S |
| 31. | F I R M/ P L A C E S |
| 32. | A N/ O L D/ T R I C K |
| 33. | K I N G/ C O B R A S |
| 34. | A R M Y/ D E P O T S |
| 35. | S I L K/ T H R E A D |
| 36. | P A I N T B R U S H |
| 37. | I/ D R E W/ J A C K S |
| 38. | T W O/ C A N D L E S |
| 39. | U P B E A T/ S O N G |
| 40. | C A M P U S/ L I F E |
| 41. | B O R I N G/ D A Y S |
| 42. | C O U N T Y/ F A I R |
| 43. | C A L M/ R E G I O N |
| 44. | F I E L D/ S P O R T |
| 45. | A D M O N I S H E R |

## SENTENCE ARITHMETIC

| | 0 1 2 3 4 5 6 7 8 9 |
|---|---|
| A. | M T E R H U O W A B |
| B. | C G B H L D E A K O |
| C. | A Y B T K L U O E H |
| D. | R C T A B E M D O H |
| E. | D R A U S I C E O K |
| F. | H A N T O M P E W D |

A black bear cub thumped my back door as he looked through the window at me.

## KROSS NUMBER KRISS KROSS HELP

788381

## NUMERABILITY

1. 17 + 13 ÷ 5 + 8 = 14
2. 8 + 15 - 22 x 3 = 3
3. 17 + 14 - 20 x 3 - 25 = 8
4. 17 + 12 - 25 + 4 - 3 = 5
5. 15 + 17 ÷ 2 - 6 + 3 = 13

*(Other solutions may be possible.)*

## FOUR SCORE

1. lily (28); silk (22); vice (17); seek (13). Total: 80 points.
2. meat (27); bail (23); mend (17); band (13). Total: 80 points.

## FIGURE LOGIC HELPS

### FIGURE LOGIC 1

21-Down is 2308.

### FIGURE LOGIC 2

By clue 24-Across, 19-Down is 16.

### FIGURE LOGIC 3

By clue 6-Down, 19-Down's last digit is 0 or 5, so by clue 19-Down, 29-Across's last digit is 6 or 1. 27-Across's first digit is 6 (clue 24-Down), so 29-Across's first digit is 9 (clue 27-Across); 29-Across is 91 or 96. By clue 29-Across, 29-Across is 91.

### FIGURE LOGIC 4

The first digit of 17-Across is 1 (clue 27-Down). The first digit of 5-Down is 4. The last digit of 19-Across is 3. The first digit of 1-Across is 2 (clue 20-Down). The last digit of 1-Across is 2 or 7 (clue 4-Across). The second digit of 20-Down and 1-Across is 4 or 5 (clue 23-Across). The second digit of 17-Across and first digit of 27-Down is 8 or 9. By clue 9-Across, it is 8 and 4 is the second digit of 20-Down. By 27-Across, 20-Down is 347.

### FIGURE LOGIC 5

The last digit of 18-Down is 1 (clue 21-Across), so the last digit of 26-Across is 3 (clue 26-Across) and the second digit of 26-Across is 2 (clue 23-Down). By clue 22-Down, then, 26-Across is 123.

### FIGURE LOGIC 6

14-Down's first digit is 1 (clue 16-Across), so 32-Across's last digit is 4 (clue 13-Across). 19-Across's last digit is 3 (clue 29-Down). By clue 9-Down, 9-Down's last digit is 5; 19-Across is 53.

### FIGURE LOGIC 7

By clue 14-Down, 23-Down's first digit is 1, so by clue 23-Across, 8-Across's first digit is 2 or 3 and last digit is an even number. By clue 8-Across, 8-Across is 345678.

### FIGURE LOGIC 8

By clue 1-B, 1-B's first digit is 1, so by clue 1-A, 7-A's first digit is 1. By clue 6-B, 18-C's last digit is 2. By clue 14-A, 10-A's first digit is greater than 3, while by clue 10-C, 10-A's first digit is less than 6; 10-A's first digit is 4 or 5. By clue 26-C, 26-C's first digit is 2, so by clue 23-A, 1-B's last digit is 0; 1-B is 10.

### FIGURE LOGIC 9

The first two digits of 6-Across are 10 (clue 13-Across), so by clue 3-Down, 4-Down is 10.

### FIGURE LOGIC 10

19-Down's first digit is * (clue 18-Across) and last digit is 0 (clue 19-Down). The sum of 9-Across's digits is no greater than 9 (clue 9-Across) so by clue 10-Down, 9-Across is 41, 52, or 63. * is 5, 7, or 9. The last digit of 34-Across, then, is, 5, 3, or 1, respectively (clue 34-Across), the last digit of 33-Across is 5, 9, or 1, respectively (clue 33-Across), and the last digit of 36-Across is 0, 4, or 0, respectively (clue 36-Across). By clue 1-Down, 36-Across's last digit is not 0; it is 4, so * is 7.

## TWO-PART MATH

A.

```
  8 7 1 3
x   9 2
-------
  1 7 4 2 6
7 8 4 1 7
---------
8 0 1 5 9 6
```

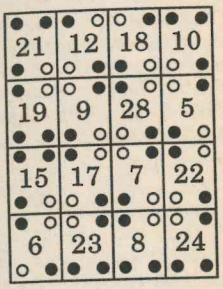
B.

```
  5 4 8
+ 5 1 8
-------
1 0 6 6
```

## CROSS SUMS HELPS

| | |
|---|---|
| 1. 713 | 11. 437521 |
| 2. 63241 | 12. 2869 |
| 3. 4567 | 13. 85967 |
| 4. 48769 | 14. 142 |
| 5. 153462 | 15. 3721 |
| 6. 163 | 16. 12537 |
| 7. 6839 | 17. 74238 |
| 8. 213 | 18. 632798 |
| 9. 897 | 19. 371462 |
| 10. 812 | 20. 15264 |

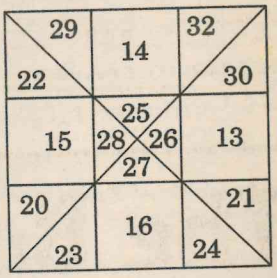
## SUM SPOTS




## SECRET SQUARES

| | | | |
|---|---|---|---|
| 18 | 5 | 22 | 7 |
| 14 | 15 | 3 | 20 |
| 1 | 23 | 11 | 17 |
| 19 | 9 | 16 | 8 |

## TRIANGULAR SQUARE




## MAGIC NUMBER SQUARE

| | | | |
|---|---|---|---|
| 14 | 42 | 40 | 20 |
| 36 | 24 | 26 | 30 |
| 28 | 32 | 34 | 22 |
| 38 | 18 | 16 | 44 |

## GO FIGURE!

| | | | |
|---|---|---|---|
| | 6 | 6 | 6 |
| 2 | 9 | 3 | 7 |
| 6 | 5 | 7 | 8 |
| 8 | 4 | 9 | |

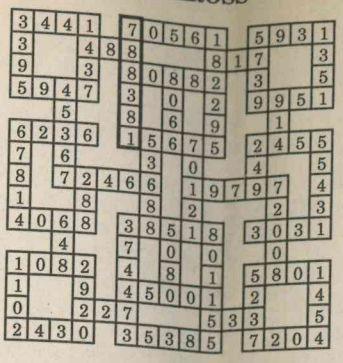
### CROSSMATH HELP

1-Across is 3 + 721

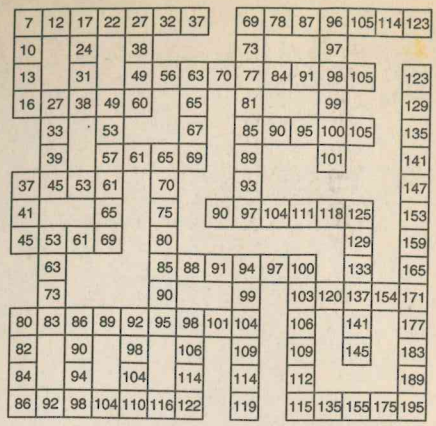
### WHAT'S THE ORDER?

Clue A and clue B list eight different numbers. Each clue has two correct numbers, so, the correct combination does not include the numbers 0 and 8. By clues D and E, the number 5 is not in the correct combination either. The remaining numbers in D and E are 1, 2, 3, 7, and 9, only two of which are in the correct combination. By elimination, 4 and 6 are also in the correct combination. By clue C, 2 is not in the correct combination and, by clue B, 3 is. It is the last digit, then, and 1 is not in the correct combination (clue E). By clue B, 6 is the first digit and, by clue C, 4 is the third digit. The last open spot is the second spot; by clue D, 7 fills that spot. The correct combination is 6743.

### KROSS NUMBER KRISS KROSS



### NUMBER FILL-IN



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| | |
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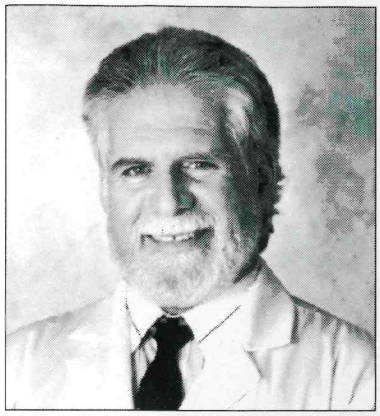

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**Complete and mail the coupon to me today, so I can rush you your FREE sample of PAIN-FREE HP.** Please act now. Supplies are limited and I don't know how much longer I can afford to make this free offer.

### FREE SAMPLE REQUEST

Mail To: Healthier YOU DP078
P.O. Box 9515
Lake Worth, FL 33466-9515

**YES** Dr. Willix! I want fast, safe arthritis pain relief – with no drugs of any kind. Rush me a FREE sample of PAIN-FREE HP plus a coupon good for one free bottle. I'm under no obligation to buy anything...ever. But I promise to tell my friends how amazingly effective it is. **(I'm enclosing $1.00, payable to Healthier YOU, to help cover postage and handling.)**

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# A premier edition from StudioHummel celebrates *Berta Hummel's* "O Come All Ye Faithful"

*Inspired by the artistry of Berta Hummel...*
*Designed and sculpted by Goebel Germany...*

INSPIRED BY THE ART OF BERTA HUMMEL™

*Shown approximately actual size of 5–1/4" (13.2 cm) tall.*

With a song on his lips and joy in his heart, a little shepherd boy leads his small flock of lambs down from the hills and into Bethlehem to celebrate the birth of the baby Jesus. Now "O Come All Ye Faithful," a new porcelain sculpture from StudioHummel, captures the soaring spirit of the familiar Christmas carol, and shows us the wonder and glory of Christ's birth as seen through the innocent eyes of a child.

Inspired by the children in Berta Hummel's beloved paintings, "O Come All Ye Faithful" is designed and sculpted by the artisans of Goebel Germany, who for more than 60 years have been entrusted with interpreting the work of this remarkable artist. Hand-crafted and hand-painted under Goebel's direction, this exquisite sculpture recreates the subtle colors, telling detail and joyous vision of Berta Hummel's art, from the rosy cheeks and twinkling eyes of the shepherd boy's cherubic face, to the lively exuberance of the young lambs at his side.

For all those who love Berta Hummel's images of children and cherish the traditional music of Christmas, "O Come All Ye Faithful" is sure to find a special place in your home and heart. Acquire this fine porcelain sculpture today, complete with a hand-numbered Certificate of Authenticity, for two payments of only $19.97 each—and treasure it for generations to come.

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